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PREDICTING TREE D. B. H. FROM STUMP MEASUREMENTS IN THE SOUTHEAST

Abstract. --When a tree has been cut and only the stump remains as an indicator of tree size, a prediction equation can be used to estimate d.b. b. from stump measurements. An improved equation model was developed from stump measurement data collected by Forest Survey special study crews in North Carolina, Virginia, and South Carolina. Independent samples from Virginia and South Carolina were used to test equations derived from only the North Carolina sample, and a pooled sample of over 14,000 trees was used to compute equation coefficients for 53 southeastern tree species.

Diameter at breast height, traditionally used to calculate tree volume, to describe stand structure, and to select inventory sample trees, is one of the most important tree measurements in forestry. Therefore, when a tree has been cut and only the stump remains as an indicator of tree size, it becomes necessary to use stump measurements to predict d. b. h. Stump measurements are frequently used to estimate timber-cut volumes in trespass cases, to determine timber removals during initial forest inventories, and to measure timber product output from stumpwood in utilization studies.

Special stump measurements were taken in conjunction with a **standing**-tree volume study during the most recent Forest Surveys of North Carolina, Virginia, and South Carolina. All live trees 5 .O inches d. b. h. and larger were measured on every tenth inventory sample location in the Piedmont and Mountains of North Carolina and throughout the State of Virginia, and on every twentieth sample location in South Carolina. On each of these trees, d. o. b. was measured with a diameter tape at ground level, and at 6-inch intervals up to 2 feet above normal ground level. On slopes, the uphill base of the tree was considered ground level. Diameters were recorded to the last tenth-inch; and measurement points falling on deformities, limbs, or abnormal swells were excluded from the sample. D. b. h. was also measured with a diameter tape and recorded to the last tenth-inch. Normally swell-butted species, such as cypress and tupelo gum, were measured from an assumed ground line, defined as 3.0 feet below the point of bottleneck; and d. b. h. was measured 1.5 feet above the point of bottleneck.

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A preliminary plotting of diameters at various heights above the ground indicated a nonlinear relationship between stump diameters and d. b. h., with stump taper varying at different rates by tree size for some species. The following equation was written to relate stump measurements to d. b. h. by species:

d.b.h. = D
$$\left[b_0 + b_1 (\text{Log H}) + b_2 (\text{Log H})^2 + b_3 (\text{DH})\right]$$

where: d. b. h. = diameter at 4.5 feet above the ground

D = stump diameter at point of measurement

H = stump height to point of measurement in feet

The equation model was conditioned to the assumption that the ratio of stump diameter and d. b. h. would be equal to 1 .OOO when stump height reached 4.5 feet. A l.O-foot constant was added to stump height to eliminate any possibility of attempting to take the logarithm of stump height at 0.0 feet. The adjusted conditioned regression equation was then written in the following form:

d.b.h. = D{bO +
$$b_1$$
 [Log(H + 1.0) - (Log 5.5)]
+ $b2$ [Log(H + 1.0) - (Log 5.5)]² + b_3 [D(H - 4.5)]}

Ten species that had a uniform sample distribution across all three states were selected to test the equation model for prediction precision and adequacy of fit. Each species was separated by state, and equation coefficients were computed from only the North Carolina sample. The remaining samples from Virginia and South Carolina were treated as two separate independent samples, and estimates of d.b. h. were made from the North Carolina equations. Aggregate deviation, average deviation, and a coefficient of determination were computed for five separate stump heights and for all heights pooled (table 1).

For general application, the entire sample of 14,318 trees was pooled; and equation coefficients were computed for 53 species from a minimum of 48 stump measurements for swamp white oak and a maximum of 9,748 for loblolly pine. Coefficients of determination computed for the pooled samples ranged from 80.40 to 96.57, with only one softwood and ten hardwood species falling below 90.00 (table 2). Tables are being prepared for the 53 species which will solve this equation and permit the user to read d. b. h. directly when stump diameter and height are known. These may be obtained on request from the Southeastern Forest Experiment Station.

		:	:		,	of equations using	independent			
Species	: height	: North Carolina : samples	Independent samples	Aggregate deviation	Average deviation	: Coefficient : : of : :determination :	Independent samples			: Coefficient : of : determination
	Feet	Number	Number	<u>Pe</u>	rcent		Number	<u>Pe</u>	rcent	
Loblolly pine	0.0	386	551	2.61	7.12	93.75	1,239	-1.22	6.78	94.25 ~
	0.5	391	584	0.78	5.39	96.61	783	-1.76	5.14	96.40
	1.0	393	611	1.09	4.17	97.92	1,237	-1.39	4.91	96.39
	1.5	393	598	0.96	3.51	98.51	796	-0.52	3.28	98.60
	2.0	393	595	0.74	2.91	98.95	798	-0.45	2.77	99.05
	All hgts.	1,956	2,939	1.21	4.55	97.28	4,853	-1.12	4.85	96.54
Shortleaf pine	0.0 0.5 1.0 1.5 2.0	432 434 434 434 2,166	312 314 339 324 330 1,619	2.21 0.23 -0.05 -0.09 -0.28 0.38	5·37 4·02 3·74 3·27 2·82 3·82	95.57 97.43 97.89 98.40 98.77 97.64	349 120 349 123 128 1,069	1.77 -0.09 1.49 1.05 0.92 1.29	6.52 4.00 4.70 3.12 2.74 4.81	93.39 96.77 96.75 98.26 98.65 95.82
Virginia pine	0.0	193	517	-0.52	6.00	92.70	35	1.81	4.89	96.85
	0.5	193	527	-0.02	4.18	96.79	25	0.41	4.50	97.66
	1.0	193	552	0.36	3.58	97.51	35	0.85	3.73	98.45
	1.5	192	530	0.12	3.11	98.11	24	0.09	3.39	98.90
	2.0	196	527	-0.29	2.78	98.44	27	-0.61	2.84	99.05
	All hgts.	967	2,653	-0.06	3.92	96.74	146	0.58	3.90	98.16
White oak	0.0	246	318	-0.38	10.12	92.80	112-	9.78	12.64	82.78
	0.5	256	408	-2.14	8.06	94.70	61	2.51	6.80	94.72
	1.0	285	626	0.18	6.81	96.01	112	3.37	6.79	94.26
	1.5	271	504	0.09	4.98	97.97	64	1.87	5.14	96.72
	2.0	274	505	0.27	4.04	98.66	70	1.41	4.09	98.01
	All hgts.	1,332	2,361	-0.31	6.52	96.22	419	4.43	7.69	92.30
Yellow-poplar	0.0	225	269	2.00	8.35	93.46	91	3.10	12.05	82.67
	0.5	249	316	1.32	6.17	96.08	23	-2.33	6.60	95.16
	1.0	273	436	1.77	5.06	97.20	91	-1.39	8.23	91.62
	1.5	265	374	1.65	3.55	98.63	31	-1.16	4.41	97.64
	2.0	266	374	1.05	2.75	99.15	31	-1.61	3.92	97.81
	All hgts.	1,278	1,769	1.55	4.97	97.07	267	0.15	8.70	89.91
Red maple	0.0	153	99	-0.38	9.76	91.14	106	-1.30	9.89	90.14
	0.5	176	155	-1.16	7.13	93.22	32	-6.90	8.98	88.11
	1.0	227	365	0.56	6.33	95.90	106	-4.43	8.31	93.90
	1.5	205	221	-0.22	4.01	98.32	44	-5.31	6.39	93.36
	2.0	209	222	-0.55	3.61	98.51	49	-3.91	4.92	95.96
	All hgts.	970	1,062	-0.15	5.76	96.08	337	-3.67	8.20	92.36
Hickory	0.0	194	180	1.49	9.91	88.52	83	2.61	8.90	92.90
	0.5	211	214	-0.42	8.02	93.30	48	-1.02	6.51	95.84
	1.0	218	290	0.66	6.11	96.35	83	2.23	7.15	94.80
	1.5	212	242	0.61	4.68	97.74	54	0.33	4.32	98.23
	2.0	215	246	0.29	3.98	98.37	54	0.02	3.66	98.65
	All hgts.	1,050	1,172	0.51	6.33	95.31	322	1.21	6.52	95.76
Sweetgum	0.0	158	177	-2.06	8.21	92.13	382	-1.92	7.89	92.84
	0.5	164	216	-1.73	5.66	95.82	152	-4.25	6.68	93.80
	1.6	179	295	-0.90	4.45	97.72	382	-3.69	5.97	94.84
	1.5	175	249	-0.51	3.52	98.64	190	-2.24	3.95	97.74
	2.0	176	252	-0.57	2.77	99.11	190	-1.71	3.29	98.40
	All hgts.	852	1,189	-1.06	4.67	97.15	1,296	-2.74	6.02	95.08
Southern red oak	0.0	58	72	2.90	9.49	92.28	38	7.19	10.60	91.17
	0.5	58	96	-0.86	6.95	94.97	23	4.38	7.09	95.24
	1.0	66	130	1.25	4.85	97.33	38	3.31	6.10	96.67
	1.5	66	113	0.71	3.40	98.73	27	2.48	4.61	97.73
	2.0	66	114	0.42	3.17	98.97	27	1.57	3.80	98.46
	All hgts.	314	525	0.80	5.23	96.68	153	3.98	6.69	95.41
Ash	0.0	39	54	8.51	10.81	91.58	41	0.57	10.80	88.27
	0.5	41	70	2.99	7.81	95.17	20	-3.25	8.69	95.10
	1.0	51	93	0.67	6.24	96.32	41	-4.69	9.17	89.03
	1.5	48	81	0.49	4.95	97.68	26	-2.10	5.49	97.72
	2.0	49	80	0.36	3.99	98.35	26	-1.75	4.90	98.30
	All hgts.	228	378	2.04	6.37	96.07	154	-2.21	8.27	93.02

Table 2.--Equation coefficients, number of samples, and coefficients of determination for tree species in the Southeast

	.	Equation	coefficients		_:	Total sample	: Coefficient
Species	. bo	: b ₁	: b ₂	: b ₃	: Trees	: Stump : measurements	of determination (r ²)
						- <u>Number</u>	
Loblolly pine	1.00000000	0.33150314	-0.13882140	0.00010372	2,243	9,748	95.88
Shortleaf pine	1.00000000	0.35290056	-0.05043818	-0.00007974	1,122	4,854	95.27
Virginia pine	1.00000000	0.31940873	-0.10179887	0.00004742	786	3,766	95 - 57
Longleaf pine	1.00000000	0.18016315	-0.28520660	0.00002939	477	1,540	93.70
Slash pine	1.00000000	0.31643895	-0.14506084	0.00061588	233	893	96.57
ond pine	1.00000000	0.24649267	-0.18288626	0.00037238	182	820	94.77
White pine	1.00000000	0.29010506	-0.17448472	-0.00026634	121	573	93.93
Pitch pine	1.00000000	0.25764710	-0.14942888	0.00004134	117	540	94.80
Table-Mountain pine	1.00000000	0.46305483	-0.02686677	-0.00151769	17	83	92.95
Redcedar	1.00000000	0.10265284	-0.38843842	0.00145796	170	587	92.80
Baldcypress	1.00000000	0.85911893	0.38282746	0.00056180	27	65	95.90
Pondcypress	1.00000000	0.73207659	0.33896952	0.00150526	23	85	93.25
Hemlock	1.00000000	0.31433149	-0.04197841	0.00005014	97	395	88.04 89.86
Red maple	1.00000000	0.22824892	-0.23961963	0.00055440	704 62	2,369 242	88.15
Sugar maple Buckeye	1.00000000	0.10937417 0.18321541	-0.35778852 -0.22825676	0.00054574	26	50	82.35
Birch (except yellow)	1.00000000	0.41145644	-0.06317975	-0.00027923	173	628	90.90
(ellow birch	1.00000000	0.26127804	-0.04649809	0.00127564	27	89	80.40
lickory	1.00000000	0.34931036		0.00019429	50h:	2 , 544	92.81
Hackberry	1.00000000	0.24284538	-0.14637565 -0.13803191	0.00019429	59 4) 27	101	90.61
ogwood	1.00000000	0.06151792	-0.19558775	0.00002147	45	175	89.49
Persimmon	1.00000000	0.40059245	-0.16110410	-0,00133960	32.		93.61
Beech	1.00000000	0.21718177	-0.34877765	0.00043017	203	710	92.03
Ash	1.00000000	0.22695885	-0.21811418	0.00070449	185	1760	90.05
Holly	1.00000000	0.09055683	-0.43432372	-0.00038296	46	173	86.66
Black walnut	1.00000000	0.13477157	-0.23031269	0.00052946	85	301	89.02
Sweetgum	1.00000000	0.24365854	-0.16720758	0.00083024	858	3,337	94.57
ellow-poplar	1.00000000	0.18226822	-0.25121994	0.00044866	806	3,314	91.43
Mulberry	1.00000000	0.36487529	-0.11002135	-0.00099534	17	63	91.23
Water tupelo	1.00000000	1.17143763	0.62007348	-0.00057143	74	152	95.14
Jpland blackgum	1.00000000	0.33929033	-0.07138280	0.00023595	157	676	92.05
owland blackgum	1.00000000	0.51879684	0.13419057	0.00130208	293	912	92.36
Sycamore	1.00000000	0.42877796	0.02654161	0.00032001	115	432	93.67
Cottonwood	1.00000000	0.20717511	-0.14268977	0.00003127	15	60	92.45
Black cherry	1.00000000	0.01596653	-0.39517284	0.00069856	5 Ó	182	85.15
hite oak	1.00000000	0.52078283	-0.06551398	-0.00001348	1,027	4,112	94.87
Swamp white oak	1.00000000	0.60830668	0.11117230	0.00006539	12	[*] 48	96.17
Scarlet oak	1.00000000	0.32904682	-0.22413832	0.00057593	438	1,891	93.47
Southern red oak	1.00000000	0.52472287	-0.06674082	-0.00027248	234	992	95.89
Cherrybark oak	1.00000000	0.48419049	0.08821150	0.00062965	47	162	95.29
aurel oak	1.00000000	0.46336496	-0.02465862	0.00041241	37	150	95.65
Swamp chestnut oak	1.00000000	0.37278710	-0.08754865	0.00058873	22	82	93.62
Chinkapin oak	1.00000000	0.22129965	-0.21641764	0.00040923	21	.77	90.47
Mater oak	1.00000000	0.40473979	-0.14296394	-0.00000277	111	445	95.41
illow oak	1.00000000	0.51265613	-0.05031719	-0.00009055	140	518	95.36
hestnut oak	1.00000000	0.26951995	-0.21508193	0.00003391	660	2,811	90.94
Northern red oak	1.00000000	0.35981095	-0.13575169	0.00033791	368	1,554	92.44
Post oak	1.00000000	0.49462800	-0.10925176	-0.00023411	192	862	95.31
Black oak	1.00000000	0.33322093	-0.17790514	0.00058950	302	1,322	93.72
Scrub oaks	1.00000000	0.23438496	-0.36373254	-0.00046291	84	306	93.14
Black locust	1.00000000	0.15059711	-0.14178539	0.00098193	201	751	84.97
Basswood	1.00000000	0.09460087	-0.26243395	0.00054435	48	178	87.44
Elm	1.00000000	0.28530990	-0.18180841	0.00031110	165	637	90.52

Joe P. McClure Principal Resource Analyst APPENDIX TABLES
for
U.S.D.A. Forest Service
Research Note SE-99
by
Joe P. McClure



STUMP DOB	0.0	0.2	0.4	0.6	0.8					EIGHT 1.8		FEET) 2.2	2.4	2,6	2.8	3.0	3.2	3.4	3.6	3.8	4.0
5.0	3.4	3.6	3.8	3.9	4.0	4.1	4.2	4.3	4.4	4.4	4.5	4.6	4.6	4.7	4.7	4.8 5.2	4.8 5.3	4.8 5.3	4.9 5.4	4.9 5.4	4.9 5.4
5.5 6.0	3.7 4.1	3.9 4.3	4.1 4.5	4.3 4.7	4.4 4.8	4.5 5.0	4.6 5.1	4.7 5.2	4.8 5.3	4.9 5.3	5.4	5.0 5.5	5.1 5.5	5.1 5.6	5.2 5.7	5.7	5.8	5.8	5.8	5.9	5.9
6.5	4.4	4.7	4.9	5.1	5.2	5.4	5.5	5.6	5.7	5.8	5.9	5.9	6.0	6.1	6.1	6.2	6.2	6.3	6.3	6.4	6.4
7.0	4.7	5.0	5.3	5.5	5.6	5.8	5.9	6.0	6.1	6.2	6.3	6.4 6.8	6.5	6.5 7.0	6.6 7.1	6.7 7.1	6.7 7.2	6.8 7.2	6.8 7.3	6.9 7.3	7.4
7.5 8.0	5.1 5.4	5.4 5.7	5.6 6.0	5.8	6.0	6.2	6.7	6.5	6.6 7.0	6.7 7.1	6.8	7.3	7.4	7.5	7.5	7.6	7.7	7.7	7.8	7.8	7.9
8.5	5.7	6.1	6.4	6.6	6.8	7.0	7.2	7.3	7.4	7.6	7.7	7.8	7.8	7.9	8.0	8.1	8.1	8.2	8.3	8.3	8.4
9.0	6.1	6.4	6.8	7.0	7.2	7.4	7.6	7.7 8.2	7.9 8.3	8.0 8.4	8.1	8.2 8.7	8.3 8.8	8.4 8.9	8.5 8.9	8.6 9.0	8.6 9.1	8.7 9.2	8.8 9.2	8.8 9.3	8.9 9.4
9.5 10.0	6.4	6.8 7.2	7.1 7.5	7.4 7.8	7.6 8.0	7.8 8.2	8.0 8.4	8.6	8.7	8.9	9.0	9.1		9.3	9.4	9.5	9.6	9.7	9.7	9.8	9.9
10.5	7.1	7.5	7.9	8.2	8.4	8.6	8.8	9.0	9.2	9.3	9.5	9.6	9.7	9.8	9.9	10.0	10.1	10.1	10.2	10.3	10.3
11.0	7.4 7.7	7.9 8.2	8.2 8.6	8.6 8.9	8.8 9.2	9.1	9.3	9.4	9.6	9.8 10.2	10.4	10.5	10.6	10.7	10.8	10.9	11.0	11,1	10.7 11.2	11.3	11.3
11.5 12.0	8.1	8.6	9.0	0 2	9 : A	9.9	10.1	10.3	10.5	10.7	10.8	10.9	11.1	11.2	11.3	11.4	11.5	11.6	11.7	11.7	11.8
12.5	8.4	8.9	9.4	9.7	10.0	10.3	10.5	10.7	10.9	11.1	11.2	11.4	12.0	12.1	12.2	12.3	12.0	12.5	12.6	12.7	12.8
13.0 13.5	8.7 9.1	9.3	10 1	10 6	100	111	11 4	11.6	11.8	12.0	12.1	12.3	12.4	12.6	12.7	12.8	12.9	13.0	13.1	13.2	10.0
14.0	0.4	100	105	100	11.2	11.5	11.8	12.0	12.2	12.4	12.6	12.8	12.9	13.0	13.2	13.3	13.4	13.3	10.0	1001	10.0
14.5 15.0	10 1	10 7	112	11 6	12.0	12.3	12.6	12.9	13.1	12.9	13.5	13.7	13.8	14.0	14.1	14.2	14.4	14.0	14.0	14•/	14.0
15.5	10 /	111	11 6	12 0	12.4	12.7	12.0	12.2	12.5	13.7	13.9	14.1	14.3	14.4	14.0	14.7	14.5	10.0	1201	12.6	10.0
16.0	10.7	11.4	12.0	12.4	12.8	13.1	13.4	13.7	14.0	14.2	14.8	15.0	15.2	15.4	15.5	15.7	15.8	15.9	16.0	16.1	16.3
16.5 17.0	11 4	12.1	12.7	12 2	13.6	14.0	14.3	14.6	14.8	15.1	15.3	15.5	15.7	12.0	10.40	To • T	10.3	10.4	10.0	10.0	10.7
17.5	117	12 5	12 1	12 6	14-0	14.4	14.7	15.0	15.3	15.5 15.9	15.7	15.9	16.1	10.3	10	10.0	16.7	10.7	1/.0	1/•1	11.6
18.0 18.5	1	122	120	1 / 2	1 / 0	1 . 2	1	1 E . Q	14.1	16.4	16.6	14.8	17.0	17.2	17.42	.1 / • 5	1/.7	1/.0	10.0	10.1	10.4
19.0	127	12 5	1 /. 2	14 7	15 2	15 6	160	16 7	16 6	1 A . R	17.1	17.3	1 (- 2	1/./	1/.9	18.0	18.4	10.2	10.2	10.0	10.
19.5	13.1	13.9	14.5	15.1	15.6	16.0	16.4	16.7	17.4	17.7	18.0	18.2	18.4	18.6	18.8	19.0	19.1	19.3	19.4	19.6	19.7
20.0 20.5	127	14 4	15 2	15 0	16.4	16 8	17.2	17.5	17.9	18.1	18.4	18.6	18.9	19.1	19.3	19.4	19.0	17.5	19.7	20 • I	20.2
21.0	14.0	1 / 0	15 6	16 2	168	17 2	17.6	18.0	18.3	18.6	18.9	19.1	19.3	19.5	19.7	17.7	20 • I	20.6	20.4	20.5	20.7
21.5	147	15 6	16.4	17 0	17.6	18.0	18.4	18.8	19.2	19.5	19.7	20.0	20.2	20.5	20.1	20.9	21.0	21.6	21.4	~ L • J	C L . 1
22.5	16 0	16.0	16 7	17 4	18.0	18.4	18.9	19.2	19.6	19.9	20.2	20.5	20.7	20.9	21.1	21.3	21.5	21.7	21.9	22.0	22.2
23.0 23.5	1 5 7	14 7	17 5	10 2	112 7	10 2	10 7	20.1	20.5	20.8	21.1	21.4	21.6	21.8	22.1	22.3	22.5	44.1	22.0	20.0	40.1
24.0	14 ^	17 0	17 9	18 5	10 1	19 7	20.1	20.5	20.9	21.2	21.5	21.8	22.1	22.3	22.5	22.7	22.9	23.L	23.3	49.0	23.0
24.5 25.0	14 7	777	18 6	10 2	19 9	20.5	20.9	21.4	21.7	22.1	22.4	22.7	23.0	23.2	23.5	23.7	23.9	24.1	24.3	24.5	24.0
25.5			10 0	10 7	20 2	20 0	21 4	21 B	ງງ ງ	22.5	29.9	27.2	77.4	74.1	73.7	74.2	24.4	24.0	24.0	2407	20 · 1
26.0 26.5		100	10 7	20 /	211	217	22.2	22.6	22.0	23.0	23.8	74-1	74.4	74.0	24.7	23.1	20.0	20.0	2201	23.7	20.1
27.0	10 0	10 1	20 0	20 8	21.5	22.1	22.6	23.1	23.5	23.8	24.2	24.5	24.8	25.1	20.3	22.0	40.0	20.0	20.2	20.4	20.0
27.5 28.0	10 4	10 0	3 A B	21 6	22.2	22 9	22.4	22.9	24.2	24.3	25.1	25.4	25.7	26.0	20.3	Z0.5	20.0	21.0	2102	2104	21.0
28.5	10.0	20 2	21 1	22 0	22 7	22 2	23.8	24.3	24.8	25.2	25.5	25.9	26.2	26.5	26.7	27.0	27.2	21.0	27.1	21.9	28.1
29.0	10 2	2∩ 5	21 5	22 7	23.1	23.7	24.2	24.7	25.2	25.6	26.0	26.3	20.0	20.7	2106	21.2	2/0/	21.7	20.2	20.4	20.0
29.5 30.0	10 0	21 2	22 2	22 1	22.9	24 5	25.1	25.6	26.1	26.5	26.9	27.2	27.5	27.9	28.1	28.4	20.7	20.7	29 · 1	27.3	47.7
30.5	20 6	21 0	22 0	22 0	24 6	25 2	25 9	26.4	26.9	26.9 27.3	27.7	28.1	28.5	28.8	29 ·· 1	27.3	29.0	27.7	30 ° T	30.3	30. 3
31.0 31.5	20 0	22 2	22 2	24 2	25.0	25.7	26.3	26.9	27.3	27.8	28.2	28.6	28.9	27.6	27.0	27.0	20.1	20.2	20.0	JU • 0	21.0
32.0	21.2	22 6	22 7	24 6	25 4	26 1	26.7	27.3	27.R	28.7	28.6	29.0	29.4	29.1	30.0	20.9	20.0	2U . 0	21 * 1	2102	2107
32.5 33.0	2.0	22 2	34 4	25 4	26 2	26 9	27.5	28.1	28.6	29.1	29.5	29.9	30.3	30.0	30.9	21.6	91.0	21.0	22.0	26.0	26.2
33.5	27 2	22 6	24.8	25 8	26.6	27.3	28.0	28.5	29.1	29.5	30.0	30.4	30.7	31.1	31.4	31.7	32.0	34.3	32.0	32.1.	22.0
34.0 34.5	22 9	24. 2	25 5	26 5	27.4	28.1	28.8	29.4	29.9	30.4	30.8	.31.3	31.6	32.0	32.3	32.0	32.9	33.6	33.3	22 + 1	94 · U
35.0	22 2	24 7	25 9	26 9	27.8	28.5	29.2	29.8	30.3	30.8 31.3	31.3	31.7	32.1	32.5	32.8	33.1	33.4	33.1	34.0	34.2	94.4
35.5 36.0	22 8	25 2	26 6	27 4	28 5	29 2	20.0	30.6	21.2	31.7	39.2	32.6	33.0	33.4	33./	34.1	34.4	34.0	34.7	22.6	92.4
36.5	26 4	25 7	27 A	28 0	2 R Q	29 7	20.4	31.1	31.6	32.1	32.0	33.1	33.5	33.0	34.2	34.3	24.0	22.1	99.4	32.1	22,7
37.0 37.5	3 · B	24 /	27 7	20 0	20 7	30 E	212	21.9	22.5	32.6	33.5	34.0	34.4	34.0	35.1	30.5	22.0	20 · I	90.4	20.0	20.7
38.0	28 1	26 7	20 0	20 1	30 1	30 0	· 21 - 7	32.3	37.0	33.4	33.9	34.4	34.8	30.2	30.0	33.9	30.3	90.0	30.7	2101	. 51.4
38.5 - 39.0	26 2	77 /	20 8	200	300	21.7	22.5	22.2	21.8	33.9 34.3	34.8	30.4	32./	40.1	90.0	20.7	2106	21.0	21.0	20.1	JU . 7
39.5	26 1	27 7	20 1	20 2	21.2	. 22.1	22.9	32.6	34.2	34.8	35.3	35./	30.2	30.0	3/.0	91.9	31.1	20.0	20.0	20.0	20.7
40.0	24 7	20 /	-0.0	21 ^	22 0	220	22 7	24.4	25.0	35.2 35.6	36.2	36.6	77.1	37.5	37.9	38.3	38.0	37.0	37.3	. 97.0	27.0
40.5 41.0	27 ^	28 8	20 2	21 4	22.4	. 32.3	24.1	24.8	35.5	36.1	35.6	37.1	31.5	30.0	30.4	30	37 · L	27.4	.57.0	. 40 • 1	40.5
41.5	27 4	29.1	30.6	วา ค	32.8	33.7	34.5	35.2	35.9	36.5 36.9	37.0	37.5	30.0	30.4	20.0	37.6	27.0	27.7	40.2	40.0	-+ U • D
42.0 42.5	20 0	20 0	212	22 K	22 6	24.5	25.2	36.1	36.7	37.4	37.9	38.4	38.9	39.4	. 39.8	40.2	40.5	40.9	41.2	41.0	41.0
43.0	202	30 1	21 6	22 0	34.0	24.9	25.7	36.5	37.2	37.8 38.2	38.4	38.9	39.4	39.8	40.2	40.6	41.0	41.4	41.7	42.0	42.5
43.5 44.0	28 9	3 n . B	1 22 . 4	22 6	34.7	7 35.7	36.6	37.3	38.0	38.7	39.2	39.8	40.3	40.7	41.2	41.0	41.9	42.3	42.1	43.0	49.9
44.5	20 3	31.2	39.7	34 0	35.1	36.1	37.0	37.7	38.5	39.1	39.7	40.2	40.7	41.2	41.0	42.0	42.4	42.0	1 43 o l	49.0	43.0
45.0 45.5	20 9	21.8	1 22.4	24 8	35.9	36.9	37.8	38.6	39.3	40.0	40.6	41.1	41.6	42.1	42.0	43.0	43.4	43.1	44.1	44.4	44.8
46.0	20.2	22.2	22.8	25 1	26.2	27.2	28.2	39.0	39.7	40.4	41.0	41.6	42.1	42.5	43.0	43.4	43.6	44.2	44.0	44.7	40.2
46.5 47.0	30.5	32.5	34.1	35.5	36.7	7 37.7 38.1	38.6	39.4	40.2	40.8	41.4	42.0	42.5	43.0	43.9	43.9	44.8	45.2	45.5	45.9	45.7
47.5	21 7		3 / C	74 7	27 /	. 28 5	30 4	40.2	41.0	1 41.7	49.2	42.9	47.4	. 47.9	44.4	44.5	45.	42.1	40.0	40 • 4	40.1
48.0	31.5	33.5	35.2	36.6	37.6	38,9	39,8	40.7	41.4	42.1	42.8	43.3	43.9	44.4	44.5	45.8	45.7	46.6	47.0	47.4	47.7
48.5 49.0	22 1	34 5	25 9	37 4	. 28.6	1 29 7	40.6	41.5	42.7	\ 43.N	43.6	44.2	44.8	45.3	45.0	40.2	40.	4/•1	. 4/.7	41.0	40.2
49.5	22 /	. 24 6	. 26 2	1 27 7	7 29.6	ጎ ፋለ 1	41.0	1 41.9	47.7	43.4	44.1	44.7	45.7	45.0	40.3	40.	4/02	4/•6	3 40 · L	40.5	48.7
50.0	32.0	29.7	, ,0,0	, 9 0 .1		0.5	1.														_

STUMP DOB	0.0	0.2	0.4	0.6	0.8	1.0		51 1.4		#EIGH1	(IN 2.0				2.8	3.0	3.2	3.4	3.6	3.8	4.0
5.0	3.6	3.7	3.9	4.0	4.1	4.2	4.3	4.3	4.4	4.5	4.5	4.6	4.6	4.7	4.7	4.8	4.8	4.8	4.9	4.9	4.9
5.5 6.0	3.9 4.3	4.1 4.5	4.3	4.4	4.5 4.9	4.6 5.0	4.7 5.1	4.8 5.2	4.8 5.3	4.9 5.4	5.0 5.4	5.0 5.5	5.1 5.6	5.1 5.6	5.2 5.7	5.2 5.7	5.3 5.8	5.3 5.8	5.3 5.8	5.4 5.9	5.4 5.9
6.5	4.6	4.9	5.0	5.2	5.3	5.4	5.5	5.6	5.7	5.8	5.9	6.0	6.0	6.1	6.1	6.2	6.2	6.3	6.3	6.4	6.4
7.0 7.5	5.0 5.4	5.2 5.6	5.4 5.8	5.6	5.7 6.1	5,9 6,3	6.4	6.1	6.2	6.3	6.8	6.4	6.5	6.5 7.0	6.6 7.1	6.7 7.1	6.7 7.2	6.8 7.2	6.8 7.3	6.9 7.3	6.9 7.4
8.0	5.7	6.0	6.2	6.4	6.6	6.7	6.8	6.9	7.1	7.2	7.2	7.3	7.4	7.5	7.5	7.6	7.7	7.7	7.8	7.8	7.9
8.5 9.0	6.1 6.4	6.4	6.6 7.0	6.8 7.2	7.0 7.4	7.1 7.5	7.3 7.7	7.4 7.8	7.5 7.9	7.6 8.0	7.7 8.1	7.8 8.2	7.9 8.3	7.9 8.4	8.0 8.5	8.1	8.2 8.6	8.2	8.3	8.3	8.4 8.9
9.5	6.8	7.1	7.4	7.6	7.8	8.0	8.1	8.3	8.4	8.5	8.6	8.7	8.8	8.9	9.0	9.0	9.1	9.2	9.2	9.3	9.4
10.0 10.5	7.1 7.5	7.5 7.9	7.8 8.1	8.0 8.4	8.2	8.4	8.5 9.0	8.7 9.1	8.8 9.3	8.9 9.4	9.1 9.5	9.2 9.6	9.3 9.7	9.3 9.8	9.4 9.9	9.5	9.6	9.7	9.7	9.8	9.9 10.4
11.0 11.5	7.9 5.2	8.2	8.5 8.9	8.8 9.2	9.0 9.4	9,2	9.4	9.6	9.7								10.6				
12.0	8.6	9.0	9.3	9.6	9.8	10.1	10.3	10.4	10.6	10.7	10.9	11.0	11.1	11.2	11.3	11.4	11.5	11.6	11.7	11.8	11.8
12.5 13.0	8.9 9.3	9.4			10.3																
13.5	9.7	10.1	10.5	10.8	11.1	11.3	11.5	11.7	11.9	12.1	12.2	12.4	12.5	12.6	12.7	12.8	13.0	13.0	13.1	13.2	13.3
14.0 14.5					11.5																
15.0	10.7	11.2	11.7	12.0	12.3	12.6	12.8	13.1	13.2	13.4	13.6	13.8	13.9	14.0	14.2	14.3	14.4	14.5	14.6	14.7	14.8
15.5 16.0					12.7																
16.5	11.8	12.4	12.8	13.2	13.6	13.9	14.1	14.4	14.6	14.8	15.0	15.1	15.3	15.4	15.6	15.7	15.8	16.0	16.1	16.2	16.3
17.0 17.5					14.0																
18.0 18.5					14.8 15.2																
19.0					15.6																
19.5 20.0					16.0																
20.5	14.7	15.4	16.0	16.5	16.9	17.2	17.6	17.9	18.1	18.4	18.6	18.8	19.0	19.2	19.4	19.5	19.7	19.8	20.0	20.1	20.2
21.0 21.5					17.3 17.7																
22.0	15.8	16.5	17.2	17.7	18.1	18.5	18.9	19.2	19.5	19.7	20.0	20.2	20.4	20.6	20.8	21.0	21.1	21.3	21.4	21.6	21.7
22.5 23.0	16.2	17.3	17.9	18.1	18.5	19.4	19.3	20.1	19.9	20.2	20.4	20.7	20.9	21.5	21.7	21.4	21.6	21.8	21.9	22.1	22.2
23.5 24.0	16.9	17.7	18.3	18.9	19.4	19.8	20.2	20.5	20.8	21.1	21.3	21.6	21.8	22.0	22.2	22.4	22.6	22.7	22.9	23.0	23.2
24.5	17.6	18.4	19.1	19.7	19.8	20.6	21.0	21.4	21.7	22.0	22.3	22.5	22.7	23.0	23.2	23.4	23.5	23.7	23.9	24.0	24.2
25.0 25.5					20.6																
26.0	18.7	19.6	20.3	20.9	21.4	21.9	22.3	22.7	23.0	23.3	23.6	23.9	24.1	24.4	24.6	24.8	25.0	25.2	25.3	25.5	25.6
26.5 27.0					21.9																
27.5	19.8	20.7	21.5	22.1	22.7	23.2	23.6	24.0	24.4	24.7	25.0	25.3	25.5	25.8	26.0	26.2	26.4	26.6	26.8	27.0	27.1
28.0 28.5					23.1																
29.0	20.9	21.9	22.7	23.4	23.9	24.5	24.9	25.3	25.7	26.1	26.4	26.7	26.9	27.2	27.4	27.7	27.9	28.1	28.3	28.4	28.6
29.5 30.0	21.7	22.6	23.5	24.2	24.4 24.8	25.3	25.8	26.2	26.6	27.0	27.3	27.6	27.9	28.1	28.4	28.6	28.4	29.0	29.2	29.4	29.1
30.5 31.0					25.2 25.6																
31.5	22.8	23.8	24.7	25.4	26.0	26.6	27.1	27.5	27.9	28.3	28.7	29.0	29.3	29.6	29.8	30.1	30.3	30.5	30.7	30.9	31.1
32.0 32.5	23.1	24.2			26.4 26.9																
33.0	23.9	24.9	25.8	26.6	27.3	27.9	28,4	28.9	29.3	29.7	30.0	30.4	30.7	31.0	31.2	31.5	31.7	32.0	32.2	32.4	32.6
33.5 34.0					27.7 28.1																
34.5 35.0	25.0	26.1	27.0	27.8	28.5	29.1	29.7	30.2	30.6	31.0	31.4	31.8	32.1	32.4	32.7	32.9	33.2	33.4	33.6	33.8	34.0
35.5	25.7	26.9	27.8	28.7	29.0 29.4	30.0	30.6	31.1	31.5	31.9	32.3	32.7	33.0	33.3	33.6	33.9	34.1	34.4	34.6	34.8	35.0
36.0 36.5					29.8 30.2																
37.0	26.8	28.0	29.0	29.9	30.6	31.3	31.9	32.4	32.9	33.3	33.7	34.1	34.4	34.7	35.0	35.3	35.6	35.8	36.1	36.3	36.5
37.5 38.0	27.2	28.4	29.4	30.3	31.1	31.7	32.7	32.8	33.8	33.8	34.2	34.5	34.9	35.2	35.5	35.8	36.1	36.8	36.6	36.8	37.5
38.5	27.9	29.2	30.2	31.1	31.9	32.6	33.2	33.7	34.2	34.7	35.1	35.5	35.8	36.2	36.5	36.8	37.0	37.3	37.5	37.8	38.0
39.0 39.5					32.3 32.7																
40.0 40.5	29.0	30.3	31.4	32.3	33.1 33.6	33 .9	34.5	35.0	35.6	36.0	36.5	36.9	37.2	37.6	37.9	38.2	38.5	38.8	39.0	39.2	39.5
41.0	29.8	31.1	32.2	33.2	34.0	34.7	35.4	35.9	36.5	36.9	37.4	37.8	38.2	38.5	38.9	39.2	39.5	39.7	40.0	40.2	40.5
41.5 42.0					34.4 34.8																
42.5	30.9	32.3	33.4	34.4	35.3	36.0	36.7	37.3	37.8	38.3	38.8	39.2	39.6	39.9	40.3	40.6	40.9	41.2	41.5	41.7	41.9
43.0 43.5	31.2	32.7	33.8	34.8	35.7 36.1	36.4	37.1 37.5	37.7	38.3	38.8	39.2	39.6	40.0	40.4	40.8	41.1	41.4	41.7	41.9	42.2	42.4
44.0	32.0	33.4	34.6	35.6	36.5	37.3	38.0	38.6	39.2	39.7	40.1	40.6	41.0	41.4	41.7	42.0	42.4	42.6	42.9	43.2	43.4
44.5 45.0					36.9 37.4																
45.5 46.0	33.1	34.6	35.8	36.9	37.8	38.6	39.3	39.9	40.5	41.0	41.5	42.0	42.4	42.8	43.1	43.5	43.8	44.1	44.4	44.7	44.9
46.5					38.2 38.6																
47.0 47.5	34.2	35.8	37.0	38.1	39.0 39.5	39.9	40.6	41.3	41.9	42.4	42.9	43,4	43.8	44.2	44.6	44.9	45.3	45.6	45.9	46.1	46.4
48.0	35.0	36.5	37.8	38.9	39.9	40.7	41.5	42.2	42.8	43.3	43.8	44.3	44.7	45.1	45.5	45.9	46.2	46.5	46.8	47.1	47.4
48.5 49.0	35.3 35.7	36.9 37.3	38.2 38.6	39.3 39.8	40.3 40.7	41.6	41.9	42.6	43.2	43.8	44.3 44.8	44.B	45.2	45.6	46.0	46.4	46.7	47.5	47.3	47.6	47.9
49.5	36.1	37.7	39.0	40.2	41.2	42.0	42.B	43.5	44.1	44.7	45.2	45.7	46.2	46.6	47.0	47.3	47.7	48.0	48.3	48.6	48.9
50.0	٥.٥٠	30.1	37.4	40.6	41.6	42.5	43.2	43.9	44.6	45.1	45.7	46.2	46.6	47.0	47.4	47.8	48.2	48.5	48.8	49.1	49.4

STUMP DOB	0.0	0.2	0.4	0.6	0.8	1.0				EIGHT 1.8	(IN 2.0	FEET) 2.2	2.4	2.6	2.8	3.0	3.2	3.4	3.6	3.8	4.0
5.0 5.5	3.5 3.9	3.7 4.1	3.9 4.3	4.0	4 • 1 4 • 5	4.2	4.3	4.4	4.4	4.5 4.9	4.5 5.0	4.6 5.1	4.6 5.1	4.7 5.2	4.7 5.2	4.8 5.2	4.8 5.3	4.8 5.3	4.9 5.4	4.9 5.4	4.9 5.4
6.0	4.2	4.5	4.6	4.8	4.9	5.0	5.1	5 • 2	5.3	5.4	5.4	5.5	5.6	5.6	5.7	5.7	5.8 6.2	5.8 6.3	5.8 6.3	5.9 6.4	5.9 6.4
6.5 7.0	4.6 4.9	4.8 5.2	5.0 5.4	5.2 5.6	5.3 5.7	5.5 5.9	5.6 6.0	5.7 6.1	5.7 6.2	5.8 6.3	5.9 6.4	6.0 6.4	6.0 6.5	6.6	6.6	6.7	6.7	6.8	6.8	6.9	6.9
7.5	5.3	5.6	5 . B	6.0	6.1	6.3	6.4	6.5 7.0	6.6 7.1	6.7 7.2	6.8	6.9 7.3	7.0 7.4	7.0 7.5	7.1 7.6	7.2 7.6	7.2 7.7	7.3 7.7	7.3 7.8	7.4 7.8	7.4 7.9
8.0 8.5	5.6 6.0	5.9 6.3	6.2 6.6	6.4 6.8	6.6 7.0	6.7 7.1	7.3	7.4	7.5	7.6	7.7	7.8	7.9	8.0	8.0	8.1	8.2	8.2	8.3	8.3	8.4
9.0 9.5	6.4	6.7 7.1	7.0 7.3	7.2 7.6	7.4 7.8	7 ,5 8.0	7.7 8.1	7.8 8.3	8.0 8.4	8.1 8.5	8.2 8.6	8.3 8.7	8.4 8.8	8.4 8.9	8.5 9.0	8.6 9.1	8.6 9.1	8.7 9.2	8.8 9.3	8 • 8 9 • 3	8.9 9.4
10.0	7.1	7.4	7.7	8.0	8.2	8.4	8.6	8.7	8.8	9.0	9.1	9.2	9.3 9.7	9.4 9.8	9.5	9.5	9.6	9.7 10.2	9.7	9.8	9.9
10.5	7.4 7.8	7.8 8.2	8.1 8.5	8.4 8.8	8.6 9.0	8.8 9,2	9.0 9.4	9.1 9.6	9.3 9.7	9.9	10.0	10.1	10.2	10.3	10.4	10.5	10.6	10.6	10.7	10.8	10.8
11.5 12.0	8.1	8.5	8.9 9.3	9.2 9.6	9.4	9.6	10.3	10-4	10.6	10.3	10.9	11.0	11.1	11.2	11.3	11.4	11.5	11.6	11.7	11.8	11.8
12.5	8.8	9 3	9 6	100	10.2	10.5	10.7	10.9	11.0	11.2	11.3	11.5	11.6	11.7	11.8	11.9	12.0	12.1	12.2	12.3	12.3
13.0 13.5	9.2 9.5	100	10 4	10 9	111	112	11 5	11.7	11.9	11.6	12.2	12.4	12.5	12.6	12.8	12.9	13.0	13.1	13.1	13.2	13.3
14.0	9.9	10.4	10.8	11.2	11.5	11.7	12.4	12.2	12.8	12.5	12.7	12.8	13.4	13.1	13.7	13.8	13.9	14.0	14.1	14.2	14.3
14.5 15.0	10.6	111	11 6	12 0	12.3	12.6	12.8	13.0	13.2	13.4	13.6	13.8	13.9	14.0	14.2	14.3	14.4	14.7	14.0	14.1	14.0
15.5 16.0	10.9	110	122	127	12.1	12.4	12.7	12.9	14.1	14.3	14.5	14.7	14.8	15.0	15.1	15.2	15.4	12.2	12.0	10./	10.0
16.5	11.6	122	127	12 1	12.5	12.8	14.1	14.3	14.6	14.8	15.0	15.1	15.3	10.4	15.0	12.1	10.0	10.0	To * T	10.5	10.5
17.0 17.5	17 2	12 0	12.5	13 9	14.3	14.6	14.9	15.2	15.5	15.7	15.9	16.1	16.2	16.4	10%5	16.7	16.8	10.9	17.0	17.2	11.3
18.0 18.5	12.7	127	1 / 2	14 7	15.1	15 5	15.8	16.1	16.3	16-6	16.8	17.0	17.1	17.3	17.5	17.6	17.8	17.9	18.0	10.1	10.2
19.0	12 4	14 1	14 6	15 1	15.5	15.9	16.2	16.5	16.B	17.0	17.2	17.4	17.6	1/.5	1/•97	10.1	10.2	10.4	10.0	10.0	To • 1
19.5 20.0	13.7	14.8	15.4	15.0	16-6	16.7	17.1	17.4	17.7	17.9	18.1	18.3	18.5	18.7	18.9	19.0	19.2	17.5	17.5	13.0	19.7
20.5	14.4	15 2	15 R	16 2	168	17 2	17 5	17.8	18.1	18.3	18.6	18.8	19.0	19.2	19.4	19.5	19.7	19.8	20.0	40 · L	20.2
21.0 21.5	15 1	15.9	16.6	17.1	17.6	18.0	18.3	18.7	19.0	19.2	19.5	19.7	19.9	20.1	20.3	20.5	20.6	20.8	20.9	21.1	21.2
22.0 22.5	15.5	16 6	17.3	17 9	18.4	18.8	19.2	19.5	19.8	20.1	20.4	20.6	20.8	21.1	21.2	21.4	21.0	21.0	21.9	22.1	22.6
23.0	16.2	17.0	17.7	18.3	18.8	19.2	19.6	20.0	20.3	20.6	20.8	21.1	21.3	21.5	21.7	21.9	22.1	22.6	22.4	22.0	22.1
23.5 24.0	14 9	177	18 5	19 1	19.6	20.1	20.5	20.8	21.2	21.5	21.7	22.0	22.2	22.5	22.7	22.9	23.0	23.2	23.4	23.3	23.1
24.5 25.0	17.2	18.1	18.9	19.5	20.0	20.5	20.9	21.7	21.6	21.9	22.2	22.5	22.7	22.9	23.6	23.8	24.0	24.2	24.3	24.5	24.7
25.5	179	188	19 6	20 3	20.8	21.3	21.7	22.1	22.5	22.8	23.1	23.4	23.6	23.9	24.1	24.3	24.0	24.1	24.0	20.0	20.1
26.0 26.5	19 6	19 6	20.4	21 1	21.6	22.1	22.6	23.0	23.4	23.7	24.0	24.3	24.5	24.8	25.0	22.2	25.4	20.0	20.0	20.0	20.1
27.0 27.5	19.0	19.9	20.8	21.5	22.0	22.6	23.0	23.4	23.8	24.6	24.5	24.7	25.0	25.3	25.0	26.2	25.9	26.6	26.8	26.9	27.1
28.0	10 6	20 7	21 5	22 2	22.0	22.4	22.9	24.3	24.7	25.0	25.4	25.7	25.9	20.2	20.4	20.1	20.7	21.1	21.0	2104	21.0
28.5 29.0	20 2	21 4	22 2	22 0	22.7	24.2	24.7	25.2	25.6	25.5	26.3	26.6	26.9	27.1	27.4	21.0	2/08	20.0	20.2	20.4	20.0
29.5	20 7	21 9	22 7	22 4	24 1	24 A	25 1	25.6	26 O	26.4	26.7	27.0	27.3	2/.0	27.8	28.1	28.3	20.0	60.1	20.9	27.1
30.0 30.5	21 4	22 5	22 4	24 2	24.9	25.5	26.0	26.5	26.9	27.3	27.6	27.9	28.2	20.5	20.0	27.0	29.3	27.3	27.1	27.7	30 • I
31.0 31.5	22 1	22 2	24 2	25 0	25.7	26.3	26.8	27.3	27.8	27.7 28.1	28.5	28.8	29.2	29.5	29.7	30.0	30.2	30.4	30.1	30.9	21.1
32.0	22 4	22 6	24.6	25 4	26.1	26.7	27.3	27.7	28.2	28.6	29.0	29.3	29.6	29.9	30.2	30.5	30.1	30.7	31.1	21.4	21.2
32.5 33.0	22 1	26 2	26 2	26 2	26 0	27 5	28.1	28 - 6	29.1	29.5	29.9	30.2	30.5	30.8	31.1	31.4	31.7	31.7	36.1	26.3	22.2
33.5 34.0	22 8	25 1	26 1	27 0	277	28.4	2 R . 9	29.5	29.9	29.9 30.4	30.8	31.1	31.5	31.8	32.1	32.3	32.0	34.7	33 · L	22.3	22.2
34.5	2/. 2	25 4	26 5	27 4	28 1	28.8	29.4	29.9	30-4	30.8	31.2	31.6	31.9	32.2	32.5	32.8	33.1	33.3	33.0	23.8	34.0
35.0 35.5	24 0	26 2	27 2	7 9 1	28 0	20 6	20.2	20.8	21.2	21.7	32.1	37.5	32.8	33.2	33.5	33.0	34.0	94.9	34.3	94.0	32.0
36.0 36.5	25.2	26.5	27.6	28.5	29.3	30.0	30.6	31.2	31.7	32.1	32.6	33.0	33.3	33.0	34.4	34.2	35.0	35.3	35.5	35.8	36.0
37.0	26 0	27 2	28 4	20 2	20 1	20 9	21.5	22.1	32.6	33.0 33.5	33.5	33.9	34.2	34.6	34.9	32.2	30.0	32.1	30.0	30.2	30.3
37.5 38.0	26 6	28 0	29 1	20 1	30.9	21.7	22.7	32.9	77.4	33.9	34.4	34.8	35.7	35.2	30.0	30 • I	30.4	3Q.1	9 / • U	21.4	21.0
38.5	26.9	28.4	29.5	30.5	31.4	32.1	32.8	33.3	33.9	34.4	34.8	35.2	35.6 36.1	36.0 36.4	36.3 36.8	36.6	36.9	37.7	37.9	38.2	38.4
39.0 39.5	27 6	20 1	30 3	21 2	22.2	22.9	23.6	34.2	34.8	35.3	35.7	36.1	36.5	36.9	37.2	31.0	31.9	30.2	30.4	2001	30.7
40.0 40.5	202	20 0	21 0	221	22 A	22.7	24.4	25.1	35.6	36.1	36.6	37.1	37.5	3/.8	38.2	30.5	38.8	37.1	37.4	37.1	39.4 39.9
41.0	28 7	20 2	21 4	22 5	33.4	34.7	24.9	35.5	36.1	36.6	37.1	37.5	37.9	38.3	38.7	39.0	39.3	37.0	37.7	40.2	40.4
41.5 42.0	20 2	20 0	222	22 2	24.2	35.0	35.7	36.4	36.9	37.5	38.0	38.4	38.8	39.2	39.6	39.9	40.3	40.6	40.9	41 • 1	41.4
42.5 43.0	300	31.6	32.9	34 0	35.0	35.R	36.6	37.2	37.8	38.4	38.9	39.3	39.8	40.2	40.5	40.9	41.2	41.5	41.0	42.1	41.9
43.5	30 4	32 A	22 2	34 4	35.4	36.2	37.0	37.6	38.2	38.8	39.3	39.8	40.2	40.6	41.0	41.4	41.7	42.0	42.3	42.0	42.9
44.0 44.5	21 1	227	24.1	25 2	36.2	37.1	37.8	38.5	39.1	39.7	40.2	40.7	41.1	41.6	41.9	42.3	42.7	43.0	43.3	43.0	43.9
45.0 45.5	31.4	33.1	34.4	35.6	36.6	37.5	38.2	38.9	39.6	40.1	40.7	41.1 41.6	41.6	42.0 42.5	42.4	42.8	43.1	43.9	44.3	44.6	44.8
46.0	32.1	33.A	35.2	36.4	37.4	. 38.3	39.1	39.8	40.4	41.0	41.6	42.1	42.5	42.9	43.3	43.1	44.1	. 44.4	44.7	42.0	40.0
46.5 47.0	29 6	34.5	36.0	1 27 2	38.2	39.1	39.9	40.6	41.3	41.9	42.5	43.0) 43.4	+ 43.9	44.3	44.7	45.0	42.4	40.7	40.0	45.8
47.5	22 1	24 9	36 3	37 6	38.6	39.5	40.3	41.1	41.7	42.3	42.9	43.4	43.9	9 44.3	44.5	45.1	45.5	47.7	40.2	40.0	46.8
48.0 48.5	22 8	25 6	. 27 1	38 3	1 29.4	40.4	41.2	41.9	42.6	43.2	43.8	44.3	44.6	3 45.3	45.1	40.1	40.0	40.0	41.4	. 4/•:	4/.0
49.0 49.5	2 / 5	36 3	27 A	1 20 1	40.3	41.7	42.0	1 42.8	43.5	44.1	44.7	45.2	45.7	7 46.2	46.6	4/.0	47.4	4/.0	48.1	48.	48.3
50.0	34.9	36.7	38.2	39.5	40.6	41.6	42.4	43.2	43.9	44.6	45.1	45.7	7 46.2	46.7	47.1	47.5	47.9	48.3	48.6	49.(49.3

STUMP DOB	0.0 0.2	0.4 0.6	0.8 1.0	1.2 1.			(IN 2.0	FEET) 2.2								3.8	4.0
5.0 5.5	3.5 3.8 3.9 4.2	4.0 4.1 4.4 4.5	4.2 4.3 4.6 4.8	4.4 4.	9 5.0	4.6 5.1	4.7 5.1	4.7 5.2	4.7 5.2	4.8 5.3	4.8 5.3	4.8 5.3	4.9 5.4	4.9 5.4	4.9 5.4	4.9 5.4	5.0 5.5
6.0	4.3 4.5 4.6 4.9	4.7 4.9 5.1 5.3	5.5 5.6	5.3 5. 5.7 5.	8 5.9	5.5 6.0	5.6 6.1	5.6 6.1	5.7 6.2	5.7 6.2	5.8 6.3	5.8 6.3	5.8 6.3	5.9 6.4	5.9	5.9 6.4	6.0 6.4
7.0 7.5	5.0 5.3 5.3 5.7	5.5 5.7 5.9 6.2	5.9 6.1 6.3 6.5	6.2 6.		6.5 6.9	6.5 7.0	6.6 7.1	6.6 7.1	6.7 7.2	6.7 7.2	6.8 7.3	6.8 7.3	6.9 7.3	6.9 7.4	6.9 7.4	6.9 7.4
8.0 8.5	5.7 6.0 6.0 6.4	6.3 6.6	6.8 6.9 7.2 7.4	7.1 7. 7.5 7.		7.4 7.8	7.5 7.9	7.5 8.0	7.6 8.1	7.7 8.1	7.7 8.2	7.8 8.2	7.8 8.3	7.8 8.3	7.9 8.4	7.9 8.4	7.9 8.4
9.0 9.5	6.4 6.8	7.1 7.4 7.5 7.8	7.6 7.8 8.0 8.2	7.9 B. 8.4 B.	1 8.2	8.3	8.4	8.5	8.5	8.6 9.1	8.7	8.7	8.8	8.8	8.9	8.9	8.9
10.0	7.1 7.5	7.9 8.2	8.4 8.6	8.8 9.	0 9.1	9.2	9.3	9.4	9.5	9.6	9.6	9.7	9.7	9.8	9.8	9.9	9.9
10.5	7.4 7.9 7.8 8.3	8.3 8.6 8.7 9.0			9 10.0			10.4	10.4	10.5	10.6		10.7	10.8	10.8	10.9	10.9
11.5 12.0	8.2 8.7 8.5 9.1	9.1 9.4 9.5 9.8	10.1 10.4	10.1 10.	8 10.9	11.1	11.2	11.3	11.4	11.5	11.6	11.6	11.7	11.8	11.8	11.9	11.9
12.5 13.0	8,9 9.4 9,2 9.8]		10.6 10.8														
13.5 14.0	9.6 10.2 1	10.7 11.1	11.4 11.7 11.8 12.1	11.9 12.	1 12.3	12.4	12.6	12.7	12.8	12.9	13.0	13.1	13.2	13.2	13.3	13.3	13.4
14.5 15.0	10.3 10.9 1	11.5 11.9	12.2 12.5	12.8 13.	0 13.2	13.4	13.5	13.6	13.8	13.9	14.0	14.1	14.1	14.2	14.3	14.3	14.4
15.5 16.0	11.0 11.7 1	12.3 1 2.7	13.1 13.4	13.7 13.	9 14.1	14.3	14.4	14.6	14.7	14.8	14.9	15.0	15.1	15.2	15.3	15.3	15.4
16.5	11.7 12.4 1	13.0 13.5	13.5 13.8	14.5 14.	8 15.0	15.2	15.4	15.5	15.7	15.8	15.9	16.0	16.1	16.2	16.2	16.3	16.4
17.0 17.5	12.0 12.8 1	13.8 14.3	14.8 15.1	15.4 15.	7 15.9	16.1	16.3	16.5	16.6	16.7	16.8	17.0	17.1	17.1	17.2	17.3	17.4
18.0 18.5	12.7 13.6 1																
19.0 19.5	13.4 14.3 1																
20.0	14.2 15.1 1	15.8 16.4		17.6 17.	9 18.2	18.4	18.6	18.8	19.0	19.1	19.3	19.4	19.5	19.6	19.7	19.8	19.8
21.0	14.9 15.8 1 15.2 16.2 1	16.6 17.2	17.7 18.1	18.5 18.	8 19.1	19,3	19.6	19.7	19.9	20.1	20.2	20.3	20.5	20.6	20.7	20.7	20.8
22.0	15.6 16.6 1	17.4 18.0	18.5 19.0	19.4 19.	7 20.0	20.3	20.5	20.7	20.9	21.0	21.2	21.3	21.4	21.5	21.6	21.7	21.8
22.5	15.9 17.0 1 16.3 17.3 1	8.2 18.8	19.4 19.9	20.3 20.	6 20.9	21.2	21.4	21.6	21.8	22.0	22.1	22.3	22.4	22.5	22.6	22.7	22.8
23.5 24.0	16.6 17.7 1 17.0 18.1 1	8.9 19.6	20.2 20.7	21.1 21.	5 21.8	22.1	22.3	22.6	22.8	22.9	23.1	23.2	23.4	23.5	23.6	23.7	23.8
24.5 25.0	17.3 18.5 1 17.7 18.8 1																
25.5 26.0	18.0 19.2 2 18.4 19.6 2																
26.5 27.0	18.7 20.0 2 19.1 20.3 2	20.9 21.7	22.3 22.9	23.3 23.	7 24.1	24.4	24.7	24.9	25.1	25.3	25.5	25.7	25.8	25.9	26.1	26.2	26.3
27.5	19.4 20.7 2	21.7 22.5	23.2 23.7	24.2 24.	6 25.0	25.3	25.6	25.8	26.1	26.3	26.5	26.6	26.8	26.9	27.0	27.2	27.3
28,5	20.1 21.4 2	22.5 23.3	24.0 24.6	25.1 25.	5 25.9	26.2	26.5	26.8	27.0	27.2	27.4	27.6	27.8	27.9	28.0	28.2	28.3
29.0 29.5	20.8 22.2 2	3.3 24.1		26.0 26.	4 26.8	27.1	27.5	27.7	28.0	28.2	28.4	28.6	28.7	28.9	29.0	29.1	29.3
30.0 30.5		24.1 24.9	25.7 26.3	26,8 27.	3 27.7	28.1	28.4	28.7	28.9	29.1	29.3	29.5	29.7	29.9	30.0	30.1	30.2
31.0 31.5	21.9 23.3 2	24.4 25. 4 24.8 25.8	26.1 26.7 26.5 27.2	27.3 27. 27.7 28.	8 28.2 2 28.6	28.5	28.8	29.1	29.4 29.9	29.6	29.8 30.3	30.0	30.2	30.3	30.5 31.0	30.6	30.7 31.2
32.0 32.5	22.6 24.1 2		26.9 27.6 27.4 28.0														
33.0 33.5	23.3 24.8 2	26.0 27.0	27.8 28.5	29.0 29.	5 30.0	30.4	30.7	31.0	31.3	31.5	31.7	31.9	32.1	32.3	32.5	32.6	32.7
34.0 34.5	24.0 25.6 2	26.8 27.8	28.6 29.3	29.9 30.	4 30.9	31.3	31.6	31.9	32.2	32.5	32.7	32.9	33.1	33.3	33.4	33.6	33.7
35.0 35.5	24.7 26.3 2	27.6 28.6	29.5 30.2	30.8 31.	3 31.8	32.2	32.6	32.9	33.2	33.4	33.7	33.9	34.1	34.3	34.4	34.6	34.7
36.0	25.0 26.7 2 25.4 27.1 2	28.4 29.4	30.3 31.0	31.7 32.	2 32.7	33.1	33.5	33.8	34.1	34.4	34.6	34.8	35.1	35.2	35.4	35.6	35.7
36.5 37.0	25.7 27.4 2 26.1 27.8 2	29.1 30.2	31.1 31.9	32.5 33.	1 33.6	34.0	34.4	34.8	35.1	35.3	35.6	35.8	36.0	36.2	36.4	36.5	36.7
37.5 38.0	26.4 28.2 2 26.8 28.6 2																
38.5 39.0	27.1 28.9 3 27.5 29.3 3																
39.5 40.0	27.8 29.7 3 28.2 30.0 3	31.1 32.3	33.2 34.0	34.7 35.	3 35.9	36.3	36.7	37.1	37.4	37.7	38.0	38.2	38.5	38.7	38.8	39.0	39.2
40.5 41.0	28.5 30.4 3	31.9 33.1	34.1 34.9	35.6 36.	2 36.8	37.2	37.7	38.0	38.4	38.7	38.9	39.2	39.4	39.6	39.8	40.0	40.2
41.5	29.2 31.2 3	32.7 33.9	34.9 35.8	36.5 37.	1 37.7	38.2	38.6	39.0	39.3	39.6	39.9	40.2	40.4	40.6	40.8	41.0	41.1
42.0 42.5	29.6 31.5 29.9 31.9	33.5 34.7	35.7 36.6	37.4 38.	0 38.6	39.1	39.5	39.9	40.3	40.6	40.9	41.1	41.4	41.6	41.8	42.0	42.1
43.0 43.5	30.3 32.3 3 30.6 32.7 3																
44.0 44.5	31.0 33.0 3 31.3 33.4 3																
45.0 45.5	31.7 33.8 3 32.0 34.1 3	35.4 36.7	37.8 38.8	39.5 40.	2 40.8	41.4	41.8	42.2	42.6	43.0	43.3	43.5	43.8	44.0	44.2	44.4	44.6
46.0 46.5	32.4 34.5 32.7 34.9	36.2 37.5	38.7 39.6	40.4 41.	1 41.7	42.3	42.8	43.2	43.6	43.9	44.2	44.5	44.8	45.0	45.2	45.4	45.6
47.0 47.5	33.1 35.3	37.0 38.4	39.5 40.5	41.3 42.	0 42.6	43.2	43.7	44.1	44.5	44.9	45.2	45.5	45.7	46.0	46.2	46.4	46.6
48.0	33.4 35.6 3 33.8 36.0 3	37.7 39.2	40.3 41.3	42.2 42.	9 43.5	44.1	44.6	45.1	45.5	45.8	46.1	46.4	46.7	47.0	47.2	47.4	47.6
48.5	34.1 36.4 3 34.5 36.8 3	38.5 40.0	41.2 42.2	43.0 43.	8 44.4	45.0	45.5	46.0	46.4	46.8	47.1	47.4	47.7	47.9	48,2	48.4	48.6
49.5 50.0	34.8 37.1 3 35.2 37.5																

STUMP	0.0 0.2 0.4 0.6 0.	STUMP	HEIGHT (IN FEET)	2.4 2.6 2.8 3.0	3.2 3.4 3.6 3.8 4.0
DOB 5.0		.0 4.1 4.2 4.3 4.	4 4.4 4.5 4.6	4.6 4.7 4.7 4.	7 4.8 4.8 4.9 4.9 4.9
5.5 6.0	3.7 3.9 4.1 4.3 4	.4 4.5 4.6 4.7 4. .8 4.9 5.0 5.1 5.	2 5.3 5.4 5.5	5.1 5.1 5.2 5.6 5.5 5.6 5.6 5.	7 5.7 5.8 5.8 5.9 5.9
6.5 7.0		.2 5.3 5.4 5.6 5. .6 5.7 5.9 6.0 6.	1 6.2 6.3 6.4	6.4 6.5 6.6 6.6	6 6 7 6 7 6 8 6 8 6 9
7.5 8.0	5.3 5.6 5.9 6.2 6	.0 6.1 6.3 6.4 6. .4 6.5 6.7 6.8 6.	.9 7.1 7.2 7.2	6.9 7.0 7.0 7. 7.3 7.4 7.5 7.	5 7.6 7.7 7.8 7.8 7.9
8.5 9.0	6.0 6.3 6.6 6.9 7	.7 6.9 7.1 7.2 7. .1 7.3 7.5 7.7 7.	8 7.9 8.0 8.1	7.8 7.9 8.0 8.0 8.2 8.3 8.4 8.	8.6 8.7 8.7 8.8 8.9
9.5 10.0	6.6 7.0 7.4 7.6 7	.9 8.1 8.3 8.5 8.	.2 8.4 8.5 8.6 .6 8.8 8.9 9.0	8.7 8.8 8.9 9.1 9.1 9.3 9.3 9.	4 9.5 9.6 9.7 9.8 9.8
10.5 11.0	7.2 7.7 8.1 8.4 8	7 8 9 9 1 9 7 9	.1 9.2 9.4 9.5 .5 9.6 9.8 9.9	10.0 10.2 10.3 10.	9 10.0 10.1 10.2 10.3 10.3 4 10.5 10.6 10.7 10.7 10.8
11.5 12.0	7.8 8.3 8.8 9.1 9	.4 9.7 9.9 10.1 10.	.3 10.5 10.7 10.8	10.9 11.1 11.2 11.	8 10.9 11.0 11.1 11.2 11.3 3 11.4 11.5 11.6 11.7 11.8
12.5 13.0		2 10 5 10 7 11 0 11	. 2 11.4 11.5 11.7	11.8 12.0 12.1 12.	8 11.9 12.0 12.1 12.2 12.3 2 12.4 12.5 12.6 12.7 12.8 7 12.8 12.9 13.1 13.2 13.3
13.5 14.0	0 1 0 7 10 2 10 6 10	.9 11.2 11.5 11.8 12.	.0 12.2 12.4 12.6	12.7 12.9 13.0 13.	2 13.3 13.4 13.5 13.6 13.8 6 13.8 13.9 14.0 14.1 14.2
14.5 15.0	A 7 1A 2 1A 8 11 2 11	7 12.0 12.3 12.6 12.	.R 13.N 13.3 13.4	13.0 13.0 13.7 14.	1 14.2 14.4 14.5 14.6 14.7 6 14.7 14.8 15.0 15.1 15.2
15.5 16.0	10 2 11 0 11 5 12 0 12	. 4 12.8 13.1 13.4 13.	.6 13.9 16.1 14.3	14.5 14.7 14.7 12.	0 15.2 15.3 15.5 15.6 15.7 5 15.6 15.8 15.9 16.1 16.2
16.5 17.0	10.9 11.6 12.2 12.7 13	.2 13.5 13.9 14.2 14	.5 14.7 15.0 15.2 .9 15.1 15.4 15.6	15.4 15.0 15.0 15.	4 16.6 16.7 16.9 17.0 17.2
17.5 18.0 18.5	11.5 12.2 12.9 13.4 13	.9 14.3 14.7 15.0 15	.3 15.6 15.8 16.1 .7 16.0 16.2 16.5	16.7 16.9 17.1 17.	3 17.5 17.7 17.8 18.0 18.1
19.0	12.0 12.9 13.5 14.1 14	.6 15.0 15.4 15.8 16	.1 16.4 16.7 16.9 .5 16.8 17.1 17.4	17.2 17.4 17.6 17.	2 18.4 18.6 18.8 19.0 19.1
20.0	12.6 13.5 14.2 14.8 15	.3 15.8 16.2 16.6 16 . 7 16 2 16.6 17.0 17	.9 17.2 17.5 17.8	18.0 18.3 18.3 18.	2 19.4 19.6 19.7 19.9 20.1
21.0	13.2 14.1 14.9 15.5 16	0.1 16.5 17.0 17.4 17 0.4 16 9 17.4 17.8 18	.7 18.1 18.4 18.6 .1 18.5 18.8 19.1	19.3 19.6 19.8 20.	1 20.3 20.5 20.7 20.9 21.1
22.0	13.8 14.7 15.5 16.2 16),8 17.3 17.7 18.2 18 7 1 17 7 18.1 18.5 18	.5 18.9 19.2 19.5 .9 19.3 19.6 19.9	20.2 20.5 20.7 21.	0 21.2 21.4 21.6 21.8 22.0
23.0	14.3 15.3 16.2 16.9 17	'.5 18.0 18.5 18.9 19 '.8 18.4 18.9 19.3 19	.3 19.7 20.0 20.4 .7 20.1 20.5 20.8	20.6 20.9 21.2 21.	9 22.1 22.4 22.6 22.8 23.0
24.0	14.9 15.9 16.8 17.5 18	3.2 18.7 19.3 19.7 20 1 5 19 1 19.6 20.1 20	1.1 20.5 20.9 21.2	21.9 22.3 22.5 22.	8 23.1 23.3 23.5 23.8 24.0
25.0 25.5	15.4 16.5 17.4 18.2 18	3.9 19.5 20.0 20.5 20	0.9 21.3 21.7 22.1 3 21.7 22.1 22.5	22.4 22.7 23.0 23. 22.8 23.1 23.4 23.	7 24.0 24.2 24.5 24.7 25.0
26.0 26.5	16.0 17.1 18.1 18.9 19	9.6 20.2 20.8 21.3 21 9 20 6 21.1 21.6 22	[.7 22.] 22.5 22.9 [.1 22.5 22.9 23.3	23.7 24.0 24.3 24	6 24.9 25.2 25.4 25.7 25.9
27.0 27.5		1 & 21 2 21 B 22.4 22).Q 73.3 73.8 74.7	74.5 74.7 23.2 23.	.1 25.4 25.6 25.9 26.2 26.4 .5 25.8 26.1 26.4 26.6 26.9 .0 26.3 26.6 26.9 27.1 27.4
28.0 28.5	17 3 18 4 18 4 30 5 31	1.2 22.6 22.6 22.2 27	1.7 24.1 24.6 25.0	25.4 25./ 20.1 20	.4 26.7 27.0 27.3 27.6 27.9 .9 27.2 27.5 27.8 28.1 28.4
29.0 29.5	17 8 10 2 20 2 31 2 21	2 A 22 7 22.3 23.9 24	4.5 74.9 75.4 75.8	26.2 20.0 Z1.0 Z1	.3 27.7 28.0 28.3 28.6 28.8 .8 28.1 28.4 28.7 29.0 29.3
30.0 30.5	18.4 19.7 20.9 21.8 22	2.7 23.4 24.1 24.7 2	5.2 25.7 26.2 26.7 5.6 26.1 26.6 27.1	27.1 27.5 27.9 28	.7 29.0 29.4 29.7 30.0 30.3
31.0 31.5 32.0	18.9 20.3 21.5 22.5 2	3.3 24.1 24.8 25.4 26 2 7 24 4 25.2 25.8 24	5.0 26.3 47.0 27.2 6.4 26.9 27.4 27.9	28.4 28.8 29.2 29	.6 29.9 30.3 30.6 30.9 31.3
32.5 33.0	19.4 20.8 22.1 23.1 24	4.0 24.8 25.5 26.2 26 4 3 35 1 35 9 36.5 25	5.8 27,3 27.8 28.3 7.2 27.7 28.2 28.7	, 28.8 29.2 29.6 30.1 30	.5 30.8 31.2 31.6 31.9 32.2
33.5 34.0	19.9 21.4 22.7 23.7 2	4.7 25.5 26.2 26.9 27 5 0 25 8 26 4 27 3 27	7.5 28.1 28.6 29.1 7.9 28.5 29.0 29.6	. 29.6 30.1 30.2 30. 30.0 30.5 30.9 31	.3 31.7 32.1 32.5 32.8 33.2
34.5 35.0	20.4 21.9 23.2 24.3 2	5.3 26,2 26.9 27.6 28 5.4 24 5 27 3 28 0 28	8.3 28.7 29.4 30.0 8 7 29.3 29.8 30.4	30.9 31.4 31.8 32	.2 32.7 33.0 33.4 33.8 34.2
35.5 36.0	20.9 22.5 23.8 25.0 2	6.0 26.9 27.7 28.4 25	9.0 29.7 30.2 30.8 9.4 30.1 30.6 31.2	3 31.3 31.0 32.2 32 3 31.7 32.2 32.7 33	.1 33.6 34.0 34.4 34.7 35.1
36.5 37.0	21.4 23.0 24.4 25.6 2	6.6 27.5 28.4 29.1 29	9.8 30.4 31.0 31.6 0.2 30.8 31.4 32.0) 32.1 32.0 33.1 33) 32.5 33.1 33.5 34	.0 34.5 34.9 35.3 35.7 36.1
37.5 38.0	21.8 23.6 25.0 26.2 2	7.3 28,2 29,1 29.8 30	0.6 31.2 31.8 32.4 0.9 31.6 32.2 32.8	. 33.0 33.3 34.0 34 3 33.4 33.9 34.4 34	.9 35.4 35.8 36.2 36.6 37.0
38.5 39.0		a 2 20 2 20 1 20 0 2'	1.7 32.4 33.0 33.6	5 34.7 34.0 35.9 32	.3 35.8 36.3 36.7 37.1 37.5 .8 36.3 36.7 37.2 37.6 38.0
39.5 40.0		0 0 10 0 10 8 21 6 2	9 A 33.1 33.8 34.4		.2 36.7 37.2 37.6 38.1 38.5 .7 37.2 37.6 38.1 38.5 39.0 .1 37.6 38.1 38.6 39.0 39.5
40.5 41.0	22 6 26 / 26 0 28 2 2	0 4 30 4 31.4 37.3 3	3.1 43.9 40.0 40.A	/ 33.9 30.4 31.0 21	.5 38.1 38.5 39.0 39.5 39.9 .0 38.5 39.0 39.5 40.0 40.4
41.5 42.0	23.9 25.9 27.5 28.9 3	0.1 31.2 32.2 33.1 3	3.9 34.6 35.4 36.0 4.2 35.0 35.8 36.4	0 36.7 37.3 37.9 30 4 37.1 37.7 38.3 38	1.9 39.4 39.9 40.4 40.9 41.4
42.5 43.0	24.4 26.4 28.0 29.5 3	0.7 31.8 32.8 33.8 3	4.6 35.4 36.1 30.0 5.0 35.8 36.5 37.2	9	7.7 40.3 40.8 41.3 41.8 42.3
43.5 44.0 44.5	24.8 26.9 28.6 30.0 3	1.3 32.5 33.5 34.5 3	5.3 36.1 36.9 37.0 4.7 36.5 37.3 38.0	6 38.3 39.0 39.0 40 6 38.7 39.4 40.0 40).6 41.2 41.7 42.3 42.8 43.3
45.0 45.5	25.3 27.4 29.1 30.6 3	11.9 33.1 34.2 35.2 3	6.1 36.9 37.7 38.4 4.4 37.3 38.1 38.4	4 39.1 39.0 40.4 41 8 39.5 40.2 40.9 41	.5 42.1 42.6 43.2 43.7 44.3
46.0 46.5	25.7 27.9 29.7 31.2 3	12.5 33.8 34.9 35.9 3	6.8 37.6 38.4 39.7	2 39,9 40.0 41.3 41 6 40.3 41.0 41.7 42	1.3 43.0 43.5 44.1 44.7 45.2
47.0 47.5	26.1 28.3 30.2 31.8 3	13.1 34.4 35.5 36.5 3 12.4 34 7 25.8 36.9 3	7.5 38.4 39.2 40.0 17.8 38.7 39.6 40.4	0 40.7 41.4 42.1 44 4 41.1 41.9 42.5 43	1.2 43.8 44.5 45.0 45.6 46.2
48.0 48.5	26.6 28.8 30.7 32.3 3	13.7 35.0 36.2 37.2 3 14.0 35 3 36.5 37.6 3	8.2 39.1 40.0 40.1 8.6 39.5 40.4 41.1	8 41.5 42.5 43.0 43 2 41.9 42.7 43.4 44	1.1 44.7 45.4 46.0 46.6 47.1
49.0 49.5	27.0 29.3 31.2 32.9 3	14.3 35.6 36.8 37.9 3	18.9 39.9 40.7 41.0	0 42.3 43.1 43.0 4.	45.6 46.3 46.9 47.5 48.1
50.0	27.4 29.7 31.7 33.4 3	34.9 36.3 37.5 38.6 3	19.5 40.6 41.5 42.	5 43.1 45.7 44.7 4;	5.4 46.0 46.7 47.3 48.0 48.6

STUMP DOB	0.0	0.2	0.4	0.6 0.8	1.0	1.2	S 1.4	TUMP 1.6	HEIGH	T (IN			2.6	2.8	3.0	3.2	3.4	3,6	3.8	4.0
5.0 5.5	3.5 3.9	3.7 4.1	4.3	4.0 4.2 4.4 4.6	4.7		4.4	4.5	4.5	4.6	4.6 5.1	4.7	5.2	4.8 5.2	4.8 5.3	4.8 5.3	4.9 5.3	4.9 5.4	4.9 5.4	4.9 5.4
6.5	4.2	4.5	5.1	4.8 5.0 5.2 5.4	5,5	5.2	5.3 5.7	5.4 5.8	5.4	5.5	5.6	5.6	5.7 6.1	5.7	5.8	5.8 6.3	5.8	5.9 6.4	5.9 6.4	5.9 6.4
7.0 7.5	4.9 5.3	5.2	5.8	5.6 5.8 6.0 6.2	6.3	6.1	6.6	6.7	6.8	6.9	6.5	7.0	7.1	6.7 7.1	6.7 7.2	6.8 7.2	6.8 7.3	6.8 7.3	6.9 7.4	6.9 7.4
8.0	5.6	6.0	6.6	6.4 6.6 6.8 7.0	7.2	7.3	7.0 7.5	7.1 7.6	7.2 7.7	7.3 7.8	7.4 7.9	7.5 7.9	7.5 8.0	7.6 8.1	7.7 8.1	7.7 8.2	7.8 8.3	7.8 8.3	7.9 8.4	7.9 8.4
9.0 9.5	6.3	7.0		7.2 7.4 7.6 7.8		7.8 8.2	7.9 8.3	8.0 8.5	8.1 8.6	8.2 8.7	8,3 8,8	8.4 8.9	8.5 8.9	8.6 9.0	8.6 9.1	8.7 9.2	8.7 9.2	8.8 9.3	8 · 8 9 · 3	8.9 9.4
10.0 10.5	7.0 7.3	7.4 7.8		8.0 8.2 8.4 8.6		8.6 9.0	8.8 9.2	8.9 9.3	9.0 9.5	9.1 9.6	9·2 9·7	9.3 9.8	9.4	9.5	9.6	9.6 10.1	9.7	9.8	9.8	9.9
11.0 11.5	7.7 8.0	8.1 8.5		8.8 9.0 9.2 9.4		9.5 9.9	9.6	9.8		10.0	10.1	10.3	10.3	10.4	10.5	10.6	10.7	10.7	10.8	10.9
12.0 12.5	8.4	8.9 9.2	9.2		10.1	10.3	10.5	10.6	10.8	10.9	11.1	11.2	11.3	11.4	11.5	11.6	11.6	11.7	11.8	11.8
13.0 13.5	9.0	9.6 1	0.0 1	0.4 10.7 0.7 11.1	10.9	11.1	11.3	11.5	11.7	11.8	12.0	12.1	12.2	12.3	12.4	12.5	12.6	12.7	12.8	12.8
14.0	9.7]	10.3	.0.7 1	1.1 11.5	11.7	12.0	12.2	12.4	12.6	12.7	12.9	13.0	13.1	13.3	13.4	13.5	13.6	13.7	13.7	13.8
15.0	10.4 1	11.0 1	1.5 1	1.9 12.3	12.6	12.8	13.1	13.3	13.5	13.6	13,8	13.9	14.1	14.2	14.3	14.4	14.5	14.6	14.7	14.3
16.0	11.0 1	11.7]	2.2 1	2.3 12.6 2.7 13.0	13.4	13.7	13.9	14.1	14.3	14.5	14.7	14.8	15.0	15.1	15.3	15.4	15.5	15.6	15.7	15.8
16.5 17.0	11.7	[2.4]	3.0 1	3.1 13.4 3.4 13.8	14.2	14.5	14.8	15.0	15.2	15.4	15.6	15.8	15.9	16.1	16.2	16.3	16.4	16.6	16.7	16.8
17.5 18.0	12.4 1	13.1 1	3.7 1	3.8 14.2 4.2 14.6	15.0	15.3	15.6	15.9	16.1	16.3	16.5	16.7	16.8	1790	17.1	17.3	17.4	17.5	17.6	17.8
18.5 19.0	13.0 1	L3.B 1	.4.4 1	4.6 15.0 5.0 15.4	15.8	16.1	16.4	16.7	17.0	17.2	17.4	17.6	17.8	17.9	18.1	18.2	18.4	18.5	18.6	18.7
19.5 20.0	13.3 1	14.2 1 14.5 1	4.8 1. 5.2 1	5.3 15.8 5.7 16.2	16.2 16.6	16.6 17.0	16.9	17.1 17.6	17.4 17.8	17.6	17.8	18.0 18.5	18.2 18.7	18.4 18.9	18.6	18.7 19.2	18.8	19.0	19.1	19.2 19.7
20.5 21.0	14.0 1	14.8 1	5.5 1	6.1 16.6 6.5 17.0	17.0	17.4	17.7	18.0	18.3	18.5	18.7	19.0	19.1	19.3	19.5	19.7	19.8	19.9	20.1	20.2
21.5 22.0	14.6 1	15.5 1	6.3 1	6.9 17.4 7.2 17.8	17.8	18.2	18.5	18.9	19.1	19.4	19.6	19.9	20.1	20.3	20.4	20.6	20.8	20.9	21.1	21.2
22.5 23.0	15.3 1	16.2 1	7.0 1	7.6 18.1 8.0 18.5	18.6	19.0	19.4	19.7	20.0	20.3	20.5	20.8	21.0	21.2	21.4	21.5	21.7	21.9	22.0	22.2
23.5 24.0	15.9 1	16.9]	7.7 1	8.4 18.9 8.7 19.3	19.4	19.8	20.2	20.6	20.9	21.2	21.4	21.7	21.9	22.1	22.3	22.5	22.7	22.8	23.0	23.2
24.5 25.0	16.6 1	17.6 1	8.4 19	9.1 19.7 9.5 20.1	20.2	20.6	21.1	21.4	21.7	22.0	22.3	22.6	22.8	23.0	23.2	23.4	23.6	23.8	24.0	24.1
25.5	17.2 1	8.3 1	9.1 19	9.8 20.5	21.0	21.5	21.9	22.3	22.6	22.9	23.2	23.5	23.7	24.0	24.2	24.4	24.6	24.8	24.9	25.1
26.5 27.0	17.8 1	18.9 1	9.8 20	0.2 20.8 0.6 21.2	21.8	22.3	22.7	23.1	23.5	23.8	24.1	24.4	24.6	24.9	25.1	25.3	25.5	25.7	25.9	26.1
27.5	18.5 1	19.6 2	0.5 2	1.0 21.6	22,6	23.1	23.5	23.9	24.3	24.7	25.0	25.3	25.5	25.8	26.0	26.3	26.5	26.7	26.9	27.1
28.0 28.5	19.1 2	20.3 2	1.2 2	1.7 22.4 2.1 22.7	23,3	23.9	24.4	24.8	25.2	25.5	25.9	26.2	26.5	26.7	27.0	27.2	27.4	27.7	27.9	28.0
29.0 29.5	19.7 2	20.9 2	1.9 22	2.4 23.1 2.8 23.5	24.1	24.7	25.2	25.6	26.0	26.4	26.7	27.1	27.4	27.6	27.9	28.2	28.4	28.6	28.8	29.0
30.0 30.5	20.3 2	21.6 2	2.6 2	3.1 23.9 3.5 24.3	24.9	25.5	26.0	26.5	26.9	27.3	27.6	28.0	28.3	28.6	28.8	29.1	29.3	29.6	29.8	30.0
31.0 31.5	20.9 2	22.3 2	3.3 24	3.9 24.6 4.2 25.0	25,7	26.3	26.8	27.3	27.7	28.1	28.5	28.9	29.2	29.5	29.8	30.0	30.3	30.5	30.8	31.0
32.0 32.5	21.2 2	22.6 2	3.7 2	4.6 25.4 5.0 25.8	26.1	26.7	27.2	27.7	28.2	28.6	28.9	29.3	29.6	29.9	30.2	30.5	30.8	31.0	31.2	31.5
33.0 33.5	21.8 2	23.2 2	4.4 2	5.3 26.1 5.7 26.5	26.8	27.5	28.0	28.5	29.0	29.4	29.8	30.2	30.5	30.8	31.2	31.4	31.7	32.0	32.2	32.5
34.0 34.5	22.4 2	23.9 2	5.1 26	6.0 26.9 6.4 27.3	27.6	28.3	28.8	29.4	29.8	30.3	30.7	31.1	31.4	31.8	32.1	32.4	32.7	32.9	33.2	33.4
35.0 35.5	23.1 2	24.5 2	5.7 26	6.8 27.6 7.1 28.0	28.4	29.0	29.6	30.2	30.7	31.1	31.6	32.0	32.3	32.7	33.0	33.3	33.6	33.9	34.1	34.4
36.0 36.5	23.6 2	25.2 2	6.4 2	7.5 28.4 7.8 28.7	29.1	29.8	30.5	31.0	31.5	32.0	32.4	32.8	33.2	33.6	33.9	34.2	34.5	34.8	35.1	35.4
37.0 37.5	24.2 2	25.8 2	7.1 2	8.2 29.1 8.5 29.5	29.9	30,6	31.3	31.8	32.4	32.9	33.3	33.7	34.1	34.5	34.8	35.2	35.5	35.8	36.1	36.4
38.0 38.5	24.8 2	26.5 2	7.8 28	8.9 29.8 9.2 30.2	30.7	31.4	32.1	32.7	33.2	33.7	34.2	34.6	35.0	35.4	35.8	36.1	36.4	36.7	37.0	37.3
39.0 39.5	25,4 2	7.1 2	8.4 29	9.6 30.6 9.9 30.9	31.4	32.2	32.9	33.5	34.0	34.6	35.0	35.5	35.9	36.3	36.7	37.0	37.4	37.7	38.0	38.3
40.0	26.0 2	27.7 2	9.1 30	0.3 31.3	32.2	33.0	33.7	34.3	34.9	35.4	35.9	36.4	36.8	37.2	37.6	38.0	38.3	38.7	39.0	39.3
41.0	26.6 2	28.3 2	9.8 3	0.6 31.7 1.0 32.0	32.9	33.7	34.4	35.1	35.7	36.3	36.8	37.2	37.7	38.1	38.5	38.9	39.3	39.6	39.9	40.3
41.5 42.0	27.2 2	19.0 3	0.4 3	1.3 32.4 1.7 32.7	33.7	34.5	35.2	35.9	36.5	37.1	37.6	38.1	38.6	39.0	39.4	39.8	40.2	40.6	40.9	41.2
42.5	27.7 2	19.6 3	1.1 3	2.0 33.1 2.4 33.5	34.4	35.3	36.0	36.7	37.4	37.9	38.5	39.0	39.5	39.9	40.4	40.8	41.1	41.5	41.9	42.2
43.5 44.0	28.3 3	10.2 3	1.8 33	2.7 33.8 3.1 34.2	35.2	36.0	36.8	37.5	38.2	38.8	39.3	39.9	40.4	40.8	41.3	41.7	42.1	42.5	42.8	43.2
44.5 45.0	28.6 3 28.9 3	10.5 3 10.8 3	2.1 33	3.4 34.5 3.7 34.9	35.5 35.9	36.4 36.8	37.2 37.6	37.9 38.3	38.6	39.2	39.8	40.3	40.8	41.3	41.7	42.1	42.5	42.9	43.3	43.7
45.5 46.0	29.2 3 29.4 3	01.1 3 01.4 3	2.7 34 3.1 34	4.1 35.2 4.4 35.6	36.3 36.6	37.2 37.6	38.0	38.7 39.1	39.4 39.8	40.0	40.6	41.2	41.7	42.2	42.6	43.1	43.5	43.9	44.3	44.6
46.5 47.0	29.7 3 30.0 3	11.7 3 12.0 3	3.4 34 3.7 35	4.8 3 6.0 5.1 3 6.3	37.0 37.4	37.9 38.3	38.8	39.5 39.9	40.2	40.9	41.5	42.0	42.6	43.1 43.5	43.5	44.0	44.4	44.8	45.2	45.6
47.5 48.0	30.3 3	2.7 3	4.0 3! 4.4 3!	5.4 36.7 5.8 37.0	37,7	38.7	39.6	40.3	41.1	41.7	42.3	42.9	43.5	44.0	44.5	44.9	45.4	45.8	46.2	46.6
48.5 49.0	30.8 3	13.0 3	4.7 36	5.1 37.4 5.5 37.7	38.5	39.4	40.3	41.1	41.9	42.5	43.2	43.8	44.3	44.9	45.4	45.8	46.3	46.7	47.1	47.6
49.5 50.0	31.4 3	3.6 3	5.3 36	5.8 38.1 7.1 38.4	39.2	40.2	41.1	41.9	42.7	43.4	44.0	44.6	45.2	45.8	46.3	46.8	47.2	47.7	48.1	48.5
		-	-		• -	• •						- • 1			,					

STUMP DOB	0.0	0.2	0.4	0.6	0.8			STL 1.4					2.4	2.6	2.8	3.0	3.2	3.4	3,6	3.8	4.0
5.0 5.5	3.5 3.8	3.7 4.1	3.9 4.2	4.0	4.1 4.5	4.2 4.6	4.3	4.4			4.6 5.0	4.6 5.1	4.7 5.1	4.7 5.2	4.8 5.2	4.8 5.3	4.8 5.3	4.9 5.3	4.9 5.4	4.9 5.4	4.9 5.4
6.0	4.2	4.4	4.6 5.0	4.8	4.9	5.1 5.5	5.2 5.6	5.3 5.7		5.4 5.9	5.5 6.0	5.6	5.6 6.1	5.7 6.1	5.7 6.2	5.8 6.2	5.8 6.3	5.8 6.3	5.9 6.4	5.9 6.4	5.9 6.4
6.5 7.0	4.5	4.8 5.2	5.4	5.6	5.8	5.9	6.0	6.2	6.2	6.3	6.4	6.5	6.5	6.6	6.7	6.7	6.8	6.8 7.3	6.8 7.3	6.9 7.4	6.9
7.5 8.0	5.2 5.6	5.6 5.9	5.8 6.2	6.0 6.4	6.2 6.6	6.3 6.8	6.5 6.9	6.6 7.0		6.8 7.2	6.9 7.3	7.0 7.4	7.0 7.5	7.1 7.6	7.6	7.7	7.7	7.8	7.8	7.9	7.9
8.5	5.9	6.3	6.6	6.8	7.0 7.4	7.2 7.6	7.3 7.8	7.5 7.9	7.6 8.0	7.7 8.2	7.8 8.3	7.9 8.3	8.0 8.4	8.0 8.5	8.1 8.6	8.2	8.2 8.7	8.3 8.8	8.3 8.8	8.4 8.9	8.4 8.9
9.0 9.5	6.3	6.7 7.1	7.0	7.6	7.9	8.1	8.2	8 • 4	8.5	8.6	8.7	8.8	8.9	9.0	9.1	9.1	9.2 9.7	9.2 9.7	9.3 9.8	9.3 9.8	9.4
10.0 10.5	7.0 7.4	7.4 7.8	7.8 8.2	8.0 8.5	8.3 8.7	8.5 8.9	8.7 9.1	8 • 8 9 • 3	9.4	9.1 9.5	9.2 9.6	9.3 9.7	9.4 9.8	9.5 9.9	9.5 10.0	10.1	10.2	10.2	10.3	10.3	10.4
11.0	7.7	8.2	8.6	8.9 9.3	۵.1	0 3	0.5	9.7 10.1	9.9 1	10.0 1	10.1	10.2	10.3	10.4	10.5	10.6 11.1	10.6 11.1	10.7	10.8 11.3	10.8 11.3	10.9 11.4
11.5 12.0	8.1 8.4	8.6	0 3	0 7	100	10 2	10 4	10.6	1 0 . 9 . 1	10.9 1	11.0	11.2	11.3	11.4	11.5	11.5	11.6	11.7	11.8	11.5	11.9
12.5 13.0	8.8 9.2	9.3	10 1	1 A B	108	111	11.7	11.0	11.7 1	11.8 1	12.0	12.1	12.2	12.3	12.4	12.5	12.0	12.1	12.1	12.5	12.9
13.5	9.5	10.1	10.5	10.9	11.2	11.5	11.7	11.9	12.1	12.7	12.4	12.6	12.7	12.8	12.9	13.5	13.6	13.6	13.7	13.8	13.9
14.0 14.5	1 4 3	100	11 2	117	12 1	12 4	12.6	12.8	13.A 1	13.2 '	13.4	13.5	13.6	13./	13.9	14.0	14.0	14.1	14.6	14.0	14.2
15.0 15.5		11 4	111	12 4	120	122	12 5	13.3	12.9 '	14.1	14.3	14.4	14.5	14./	14.5	14.7	10 · U	13 4 1	1206	12.2	17.0
16.0		12 0	12 5	12 0	122	12.7	12.9	14.2	14.4 '	14.6	14.8	14.9	15.1	15.2	10.5	12.4	10.0	12.0	1201	13.0	12.0
16.5 17.0			177		1 /. 2	1 / E	1 / R	15.1	14.2	15.5	15.7	15.9	16.0	10.1	10.0	10.4	10.7	10.0	10.1	TO • 0	10.0
17.5 18.0								15.5													
18.5	1 2 2	120	1 / 5	15 0	15 5	15 R	16.2	16.4	16.7	16.9	17.1	17.3	17.4	1/.0	1/#//	17.5	11.7	10.0	TO . T	10.5	10.5
19.0 19.5	13 0	1 / 7	16 /	15 0	16 2	16 7	17 0	17.3	17.6	17.8	18.0	18.2	18.4	16.2	10.7	10.0	10.9	17.0	1701	1706	17.2
20.0 20.5		1	14 2	14 7	177	17 6	17 9	17.8 18.2	18.5	1 R . R	19.0	19.7	19.3	19.5	19.0	17.5	19.9	20.0	20 • I	2002	20.3
21.0	16 0	15 0	16 6	17 1	17.6	18.0	18.4	18.7	19.0	19.2	19.4	19.6	19.8	20.0	20.1	20.3	20.4	20.5	20.0	20.1	20.0
21.5 22.0	1	14 7	17 /	18 0	10 5	120	10 3	19.6	19.9	20.1	20.4	20.6	20.8	20.9	21.1	21.2	21.4	61.0	21.0	21.1	61.0
22.5 23.0		17 /	10 7	100	10 2	10 8	20 2	20.1	20.8	21.1	21.3	21.5	71.7	71.9	22.1	26.6	44.0	66.3	44.0	6601	L L + 0
23.5	16.9	17.8	18.6	19.2	19.8	20.2	20.6	21.4	21.3	21.5	21.8	22.5	22.7	22.9	22.5	23.2	23.3	23.5	23.6	23.7	23.8
24.0 24.5	17 4	10 4	10 4	20 1	20 6	21.1	21.5	21.9	22.2	27.b	77.7	23.0	23.2	23.4	60.0	23.1	60.0	63.7	24.1	44.6	27.3
25.0 25.5	10 /	10 /	20 2	200	21 6	22 0	22 A	22.3	22.1	27.4	23.7	23.9	24.1	74.3	24.3	64.1	24.0	64.7	6-1-1	4006	22.2
26.0 26.5	18.7	19.8	20.7	21.4	21.9	22.4	22.9	23.3	23.6	23.9	24.2	24.4	25.1	25.3	25.5	25.6	25.8	25.9	26.0	26.2	26.3
27.0	10 5	20 6	21 5	22 2	22 B	22.2	22.R	24.2	24.5	24.8	25.1	25.3	20.0	22.0	20.0	20.1	20.3	20.7	20.7	2001	20.0
27.5 28.0		21 /	22 2	22 1	22 7	2/ 2	24 7	25 1	25 4	2 K. R	26.0	26.3	26.5	76./	26.9	21.1	41.3	61.4	21.0	21.0	21.0
28.5 29.0		22 2	22 1	220	21. 6	25 1	25 6	25.5	26 4	2 h . 7	27.O	77.3	77.5	71.1	21.7	20.1	20.2	40.7	20.0	20.0	20,0
29.5	21.4	22.6	23.5	24.3	25.0	25.6	26.0	26.5	26.8	27.2	27.5	28.2	28.5	28.7	28.4	29.1	29.2	29.4	29.5	29.6	29.8
30.0 30.5		~ ~ /	2//		25 0	24 6	27 0	27 /	27 8	28 I	78.4	2 H . 7	7× 4	79.7	/7.4	/9.3	29.1	67.7	20.0	20 • I	20.2
31.0 31.5	22.5	24. 2	25 2	26.0	26 8	27.2	27.9	27.9	2 R . 7	29.1	29.4	79.7	29.9	3U . L	20.2	20.2	20 • /	20.7	21.0	2101	21.4
32.0	23.3	24.6	25.6	26.5	27.2	27.8	28.3	28.8	29.2	29.5	29.9	30.6	30.4	30.6	31.3	31.5	31.7	31.8	32.0	32.1	32.2
32.5 33.0	2/ 1	9 E /	74 5	17 2	28 1	28 7	20 2	29.7	30.1	30.5	30.8	31.1	31.4	31.0	31.8	32.0	32.2	26.3	34.0	22.0	24.1
33.5 34.0	2/ 2	26 2	27 2	20 2	20 0	20 K	20.2	30.2	21.1	31.4	31.8	37.1	32.3	32.0	34.0	22.0	22.6	22,2	22.2	22.0	22.1
34.5	25.2	26.6	27.7	28.6	29.4	30.1	30.6	31.6	31.5	32.4	32.2	33.0	33.3	33.5	33.8	34.0	34.2	34.3	34.5	34.6	34.7
35.0 35.5	24 0	27 /	20 6	20 5	3 0 3	31.0	21.5	32.n	22.5	37.9	33.7	34.5	33.5	34.0	34.3	24.2	24.0	24.0	99.0	コン・ト	37.6
36.0 36.5	24 0	202	20 /	20 /	21 2	ם וג	22 4	32.5	22.4	33.H	34.7	34.5	34.8	32.0	22.6	33.4	22.0	22.0	20.0	20.1	JU. Z
37.0 37.5	27.2	28.6	29.8	30.8	31.6	32,3	32.9	33.4	33.9	34.8	34.6	35.4	35.7	36.0	36.2	36.4	36.6	36.8	37.0	37.1	37.2
38.0	27 0	30 6	30 7	' 21 7	32 E	22 2	22. R	24-4	24.8	35.2	35.6	75.9	36.7	30.5	30 • /	30.7	3/+1	21.2	21.0	21.0	37.7 38.2
38.5 39.0	20 7	20 2	21 5		32 /	24 1	24 8	25.2	25.R	3h.7	30.0	30.9	41.7	4 (. 2	91.1	31.7	20.1	20.2	20.4	J 0 • 0	30.
39.5 40.0	20 5		22 /		3 / 3	25 A	25 7	35.8	26.7	77.1	37.5	37.9	48.2	45.4	20 . /	30.7	27.1	27.2	27.4	27.0	27.1
40.5	20 0			22 0	3/. 8	25 5	26.1	24.7	37.2	37.6	38.0	38.4	38.7	38.9	39.2	37.4	- 37.0	37.0	97.7	40.1	40.7
41.0 41.5	30 7	7 7 7 7	י בנו	7 34 8	25 7	26 4	27.1	37.6	3 R . 1	38.6	39.0	39.3	39.6	37.7	40.2	40.4	40.0		40.7	41.1	41.2
42.0 42.5	21 6	. 12 1	27. 5	3 2 5 A	36.6	37.3	28.0	38.6	39.1	39.5	39.9	40.3	40.0	40.9	41.1	41.4	41.0	41.0	41.07	76.1	41.7
43.0	21.0	2 2 2 4	35 /	1 26 1	27 0	27 B	28 5	20.1	39.A	40.0	40.4	40.8	41.1	41.4	41.0	41.5	42.1	42.0	42.4	42.0	42.7
43.5 44.0	22	7 34 /	. 25 8	27 ^	27 Q	28 7	29.4	40.0	40.5	41.0	41.4	41.8	4Z.1	44.4	42.0	42.7	49.	, 40.0	49.4	43.0	, 43. '
44.5 45.0	33.1	34.8	36.2	2 37.4	38.4	39.2	39.9	40.5	41.0	41.5	41.9	42.2	42.0	42.9	43.6	43.9	44.1	44.3	44.4	44.6	44.7
45.5	33.9	35.	7 37.	1 38.3 5 28 7	39.3	40.1	40.8	41.4	42.0	42.4	42.9	43.2	44.0	44.3	44.6	44.8	45.	45.3	45.4	45.6	45.7
46.0 46.5	37.	7 26 1	5 28 (30 2	40.2	41.0	41.7	42.4	42.9	43.4	43.8	44.2	44.5	44.8	45.1	40.5	9 45.0	, 42.1	42.7	40.	. 40.2
47.0 47.5	35.	36.9	38.4	39.6	40.6	41.5	42,2	42.8	43.4	43.9	44.3	44.7	45.0 45.5	45.8	45.0	46.3	46.6	46.7	46.9	47.	47.2
48.0	35.9	37.1	39.	3 40.5	41.5	42.4	43.2	43.8	44.4	44.9	45.3 45.8	45.7	46.0	46.8	47.1	47.3	47.0 3 47.0	47.7	7 47.9	48.1	48.2
48.5 49.0	74 '	7 70 /	6 / O '	2 / 1 /	. 42 5	422	44 1	44. R	45.3	45.R	46.3	46.7	47.0	47.3	47.0	4/.	5 48.1) 40.2	40.	+ 40.0	90.1
49.5 5 0.0	37. 37.	39.0 5 39.	5 41.0	41.9	42.9	43.8	44.6 45.0	45.7	45.8	46.8	47.2	47.6	48.0	48.3	48.6	48.	49.0	49.2	49.4	49.6	49.2

STUMP DOB	0.0 0.2	0.4 0.6	0.8 1.0	1,2 1							2.8	3.0	3.2	3,4	3.6	3.8	4.0
5.0 5.5	3.6 3.8 4.0 4.2	4.0 4.1			4 4.5	4.6 5.0	4.6 5.1	4.7 5.1	4.7 5.2	4.7 5.2	4.8	4.8 5.3	4.8 5.3	4.9 5.4	4.9	4.9	4.9 5.4
6.0	4.4 4.6	4.8 4.9	5.0 5.1	5.2 5	3 5.4	5.5	5.5	5.6	5.6	5.7	5.7	5.8	5.8	5.8	5.9	5.9	5.9
6.5 7.0	4.7 5.0 5.1 5.3	5.2 5.3 5.6 5.7			8 5.8 2 6.3	5.9 6.4	6.0	6.0	6.1	6.2	6.2	6.2	6.3	6.8	6.4	6.4	6.4
7.5	5.4 5.7	5.9 6.1	6.3 6.4	6,5 6	7 6.7	6.8	6.9	7.0	7.0	7.1	7.2	7.2	7.3	7.3	7.3	7.4	~7.4
8.0 8.5	5.8 6.1 6.2 6.5	6.3 6.5				7.3 7.7	7.4 7.8	7.4	7.5 8.0	7.6 8.0	7.6 8.1	7.7 8.2	7.7 8.2	7.8 8.3	7.8 8.3	7.9 8.4	7.9 8.4
9.0	6.5 6.9	7.1 7.4	7.5 7.7	7.9 B	0 8.1	8.2	8.3	8.4	8.4	8.5	8.6	8.6	8.7	8.8	8.8	8.9	8.9
9.5 10.0	6.9 7.2 7.3 7.6	7.5 7.8 7.9 8.2			9 9.0	8.7 9.1	8.7 9.2	9.3	8.9 9.4	9.0 9.5	9.1 9.5	9.1	9.2 9.7	9.2 9.7	9.3	9.3 9.8	9.4 9.9
10.5	7.6 8.0	8.3 8.6	8.8 9.0	9.2 9	3 9.4	9.6	9.7	9.8	9.9	9.9	10.0	10.1	10.2	10.2	10.3	10.3	10.4
11.0 11.5	8.0 8.4 8.3 8.8	8.7 9.0 9.1 9.4		9.6 9		10.0											
12.0 12.5	8.7 9.1 9.1 9.5	9.5 9.8	10.1 10.3	10.5 10	6 10.8	10.9	11.0	11.2	11.3	11.4	11.4	11.5	11.6	11.7	11.7	11.8	11.9
13.0		10.3 10.6	10.5 10.7	11.3 11	5 11.7	11.8	12.0	12.1	12.2	12.3	12.4	12.5	12.6	12.6	12.7	12.8	12.4
13.5 14.0	9.8 10.3 1 10.1 10.7 1	10.7 11.0	11.3 11.6	11.8 12	0 12.1	12.3	12.4	12.6	12.7	12.8	12.9	13.0	13.1	13.1	13.2	13.3	13.3
14.5	10.5 11.0 1	11.5 11.8	12.1 12.4	12.6 12	8 13.0	13.2	13.3	13,5	13.6	13.7	13.8	13.9	14.0	14.1	14.2	14.3	14.3
15.0 15.5	10.9 11.4 1	11.9 12.2	12.6 12.8	13.1 13	3 13.5	13.6	13.8	13.9	14.1	14.2	14.3	14.4	14.5	14.6	14.7	14.8	14.8
16.0	11.6 12.2 1	12.7 13.1	13.4 13.7	13.9 14	2 14.4	14.6	14.7	14.9	15.0	15.1	15.3	15.4	15.5	15.6	15.7	15.7	15.8
16.5 17.0	12.0 12.6 1	13.1 13.5 13.5 13.9	13.8 14,1 14.2 14.5	14.4 14	6 14.8	15.0	15.2	15.8	15.5	15.6	15.7	15.8	16.0	16.1	16.1	16.2	16.3
17.5	12.7 13.3 1	13.8 14.3	14.7 15.0	15.2 15	5 15.7	15.9	16.1	16.3	16.4	16.6	16.7	16.8	16.9	17.0	17.1	17.2	17.3
18.0 18.5	13.0 13.7 1																
19.0	13.8 14.5 1	15.0 15.5	15.9 16.2	16.6 16	8 17.1	17.3	17.5	17.7	17.8	18.0	18.4	18.2	18.4	18.5	18.6	18.7	18.8
19.5 20.0	14.1 14.8 1																
20.5	14.8 15.6 1	16.2 16.7	17.2 17.5	17.9 18	1 18.4	18.6	18.9	19.0	19.2	19.4	19.5	19.7	19.8	19.9	20.1	20.2	20.3
21.0 21.5	15.2 16.0 1 15.6 16.4 1																
22.0	15.9 16.7 1	17.4 17.9	18.4 18.8	19.2 19	5 19.7	20.0	20.2	20.4	20.6	20.8	21.0	21.1	21.3	21.4	21.5	21.6	21.7
22.5 23.0	16.3 17.1 1 16.6 17.5 1	17.8 18.3 18.2 18.7	18.8 19.2 19.2 19.7	19.6 19	9 20.2 4 20.6	20.5	20.7	20.9	21.1	21.8	21.4	21.6	21.7	21.9	22.0	22.1	22.2
23.5	17.0 17.9 1	18.6 19.2	19.7 20.1	20.5 20	8 21.1	21.4	21.6	21.8	22.0	22.2	22.4	22.6	22.7	22.9	23.0	23.1	23.2
24.0 24.5	17.3 18.2 1 17.7 18.6 1	19.0 19.6 19.4 20.0	20.1 20.5	20,9 21	.2 21.5 .7 22.0	21.8	22.1	22.8	22.5	22.7	22.9	23.0	23.2	23.8	23.5	23.6	23.7
25.0	18-1 19-0 1	19.7 20.4	20.9 21.4	21.8 22	1 22.4	22.7	23.0	23.2	23.4	23.6	23.8	24.0	24.2	24.3	24.5	24.6	24.7
25.5 26.0	18.4 19.4 2 18.8 19.8 2	20.1 20.8 20.5 21.2	21.3 21.8	22.2 22	0 22.9 0 23.3	23.2	23.4	23.7	23.9	24.1	24.8	24.5	24.6	24.8	24.9	25.1	25.2
26.5	19.1 20.1 2	20.9 21.6	22.1 22.6	23.1 23	4 23.8	24.1	24.4	24.6	24.8	25.1	25.3	25.4	25.6	25.8	25.9	26.1	26.2
27.0 27.5	19.5 20.5 2 19.9 20.9 2	21.7 22. 4	23.0 23.5	23.9 24	9 24.2 3 24.7	25.0	25.3	25.5	25.8	26.0	25.7	25.9	26.6	26.7	26.4	27.0	26.7
28.0 28.5	20.2 21.3 2	22.1 22.8	23.4 23.9	24.4 24	8 25.1	25.4	25.7	26.0	26.2	26.5	26.7	26.9	27.1	27.2	27.4	27.5	27.7
29.0	20.6 21.6 2																
29.5 30.0	21.3 22.4 2	23.3 24.0	24.6 25.2	25.7 26	1 26.5	26.8	27.1	27.4	27.6	27.9	28.1	28.3	28.5	28.7	28.9	29.0	29.2
30.5	22.0 23.1 2	24.1 24.8	25.5 26.0	26,5 27	0 27.3	27.7	28.0	28.3	28.6	28.8	29.1	29.3	29.5	29.7	29.8	30.0	30.1
31.0 31.5	22.4 23.5 2 22.7 23.9 2	24.5 2 5. 2 24.8 25.6	25.9 26.5 26.3 26.9	27.0 27	4 27.8	28.2	28.5	28.8	29.0	29.3	29.5	29.7	29.9	30.1	30.3	30.5	30.6
32.0	23.1 24.3 2	25.2 26.0	26.7 27.3	27.8 28	3 28.7	29.1	29.4	29.7	30.0	30.2	30.5	30.7	30.9	31.1	31.3	31.5	31.6
32.5 33.0	23.4 24.7 2 23.8 25.0 2	25,6 26, 4 26,0 26,8	27.1 27.7 27.5 28.2	28.7 29	7 29.1	29.5	29.9	30.2	30.4	30.7	31.0	31.2	31.4	31.6	31.8	32.0	32.1
33.5	24.2 25.4 2	26.4 27.3	28.0 28.6	29.1 29	6 30.0	30.4	30.8	31.1	31.4	31.7	31.9	32.1	32.4	32.6	32.8	32.9	33.1
34.0 34.5	24.5 25.8 2																
35.0	25.2 26.5 2	27.6 28.5	29.2 29.9	30.4 30	9 31.4	31.8	32.1	32.5	32.8	33.1	33.3	33.6	33.8	34.0	34.2	34.4	34.6
35.5 36.0	25.6 26.9 2 25.9 27.3 2	28.4 29.3	30.0 30.7	31.3 31	8 32.3	32.7	33.1	32.9	33.2	34.0	33.8	34.1	34.8	35.0	34.7	34.9	35.1
36.5 37.0	26.3 27.7 2 26.7 28.0 2	28.8 29.7	' 30.5 31.1	31.7 32	2 32.7	33.1	33.5	33.9	34.2	34.5	34.8	35.0	35.3	35.5	35.7	35.9	36.1
37.5	27.0 28.4 2	29.5 30.5	31.3 32.0	32.6 33	1 33.6	34.0	34.4	34.8	35.1	35.4	35.7	36.0	36.2	36.4	36.7	36.9	37.1
38.0 38.5	27.4 28.8 2 27.7 29.2 3	29.9 30.9 30.3 31 3	31.7 32.4 32.1 32 8	33.0 33	6 34.0	34.5	34.9	35.2	35.6	35.9	36.2	36.4	36.7	36.9	37.2	37.4	37.6
39.0	28.1 29.5 3	30.7 31.7	32.5 33.2	33.9 34	4 34.9	35.4	35.8	36.2	36.5	36.8	37.1	37.4	37.7	37.9	38.1	38.3	38.5
39.5 40.0	28.4 29.9 3 28.8 30.3 3																
40.5	29.2 30.7 3	31.9 32.9	33.8 34.5	35,2 35	7 36.3	36.7	37.2	37.6	37.9	38.2	38,6	38.8	39.1	39.4	39.6	39.8	40.0
41.0 41.5	29.5 31.0 3 29.9 31.4 3	32.3 33.3 32.7 33.7	34.2 34.9 34.6 35.4	35.6 36. 36.0 36.	2 36.7 6 37.2	37.2	37.6	38.0	38.4	38.7	39.0	39.3	39.6	39.8	40.1	40.3	40.5
42.0	30.2 31.8 3	33.1 34.1	35.0 35,8	36.5 37	1 37.6	38.1	38.5	38.9	39.3	39.7	40.0	40.3	40.6	40.8	41.1	41.3	41.5
42.5 43.0	30.6 32.2 3 30.9 32.5 3	93.4 34.5 33.8 34.9	35.4 36.2 35.8 36.6	36.9 37	.5 38.0 .9 38.5	38.5	39.0	39.4	39.8	40.1	40.5	40.8	41.0	41.8	41.5	41.8	42.0
43.5	31.3 32.9 3	34,2 35.3	36.2 37.0	37.8 38	4 38.9	39.4	39.9	40.3	40.7	41.1	41.4	41.7	42.0	42.3	42.5	42.8	43.0
44.0 44.5	31.6 33.3 3 32.0 33.7 3	35.0 36.1	37.1 37.9	38.6 39	. 6 39.4 .3 39.8	39.9 40.3	40.4	40.8	41.2	41.5	41.9	42.2	42.5	42.8	43.0	43.3	43.5 44.0
45.0 45.5	32.4 34.0 3	35.4 36.5	37.5 38.3	39.0 39	7 40.3	40.8	41.3	41.7	42.1	42.5	42.8	43.1	43.4	43.7	44.0	44.2	44.5
46.0	32.7 34.4 2 33.1 34.8 3	36.2 37.3	38.3 39.2	39.9 40	6 41.2	41.7	42.2	42.6	43.0	43.4	43.8	44.1	44.4	44.7	45.0	45.2	45.5
46.5 47.0	33.4 35.2 3	36.6 37.7	38.7 39,6	40.3 41	0 41.6	42.1	42.6	43.1	43.5	43.9	44.2	44.6	44.9	45.2	45.4	45.7	45.9
47.5	33.8 35.5 3 34.1 35.9 3	37.3 38.5	39.5 40.4	41.2 41	9 42.5	43.0	43.6	44.0	44.4	44.8	45.2	45.5	45.8	46.1	45.4	46.7	46.9
48.0 48.5	34.5 36.3 3 34.8 36.7 3	37.7 38.9	40.0 40.8	41.6 42	3 42.9	43.5	44.0	44.5	44.9	45.3	45.7	46.0	46.3	46.6	46.9	47.2	47.4
49.0	35.2 37.0 3	38.5 39.7	40.8 41.7	42.5 43	2 43.8	44.4	44.9	45.4	45.8	46.2	46.6	47.0	47.3	47.6	47.9	48.2	48.4
49.5 50.0	35.5 37.4 3 35.9 37.8 3	38.9 40.1	41.2 42.1	42.9 43	6 44.3	44.9	45.4	45.9	46.3	46.7	47.1	47.4	47.8	48.1	48.4	48.6	48.9
												7.07	7013	,,,,	70.7	4107	7/17

								57	UMP H	EIGHT	CIN	FEET)									
STUMP DOB	0.0	0.2	0.4	0.6	0.8	1.0	1.2	1.4	1.6	1.8	2.0	2.2	2.4	2.6					3.6	3.8	4.0
5.0	3.4	3.6	3.7	3.9	4.0	4.1	4.2	4.3	4.3	4.4	4.5	4.5	4.6	4.6	4.7	4.7	4.8	4.8	4.9	4.9	4.9
5.5	3.7	3.9	4.1	4.3	4.4	4.5	4.6	4.7	4.8	4.9	4.9	5.0	5.1	5.1	5.2	5.2	5.3	5.3	5.3	5.4 5.9	5.4 5.9
6.0	4.1	4.3	4.5	4.7	4.8	4.9	5.0	5.1	5.2	5.3	5.4	5.5	5.5	5.6	5.6	5.7	5.7	5.8	5.8 6.3	6.4	6.4
6.5	4.5	4.7	4.9	5.1	5.2	5.4	5.5	5.6	5.7	5.8	5.9	5,9	6.0	6.1	6.1	6.2	6.2	6.3	6.8	6.9	6.9
7.0	4.8	5.1	5.3	5.5	5.7	5.8	5.9	6.0	6.1	6.2	6.3	6.4	6.5	6.5	6.6	6.7 7.1	6.7 7.2	7.3	7,3	7.4	7.4
7.5	5.2	5.5	5.7	5.9	6.1	6,2	6.4	6.5	6.6	6.7	6.8	6.9	6.9	7.0 7.5	7.1 7.6	7.6	7.7	7.7	7.8	7.8	7.9
8.0	5.6	5.9	6.1	6.3	6.5	6.7	6.8	6.9	7.1	7.2	7.3	7.3 7.8	7.4 7.9	8.0	8.0	8.1	8.2	8.2	8.3	8.3	8.4
8.5	6.0	6.3	6.5	6.8	6.9	7.1	7.3	7.4	7.5	7.6 8.1	7.7 8.2	8.3	8.4	8.5	8.5	8.6	8.7	8.7	8.8	8.8	8.9
9.0	6.3	6.7	6.9	7.2	7.4	7.6	7.7	7.8 8.3	8.0	8.6	8.7	8.8	8.9	8.9	9.0	9.1	9.2	9.2	9.3	9.3	9.4
9.5	6.7	7.1	7.4	7.6	7.8	8.0	8.2	8.8	8.9	9.0	9.1	9.2	9.3	9.4	9.5	9.6	9.7	9.7	9.8	9.8	9.9
10.0	7.1	7.5	7.8 8.2	8.0	8.3	8.4	9.1	9.2	9 4	0.5	0.4	9.7	Q. R	9.9	10.0	10.1	10.1	10.2	10.3	10.3	10.4
10.5	7.5	7.9 8.3	8.6	8.9	9.1					10 0	10 1	10 2	10.3	10.4	10.5	10.6	10.6	10.7	10.8	10.8	10.9
11.0	7.9 8.3	8.7	9.0			ດ໌ຄ	10.0	10 2	1 4 2	10 5	10.6	10.7	10.8	10.9	11.0	11.1	11.1	11.2	11.3	11.0	11.4
11.5	8.7	9.1								100		117	11 2	11.4	11.7	11.0	11.0	Llaf	11.0	TT * O	1107
12.5	=					10 7	100	111	11 2	11 4	11.5	11.7	11.7	11.7	1 Z • U	12.0	14.1	16.6	1400	1603	1607
13.0																					
13.5																					
14.0																					
14.5																					
15.0																					
15.5	11.6	12.1	12.6	13.0	13.3	13.5	13.8	14.0	14.2	14.5	18.0	15.1	15.2	15.4	15.5	15.5	15.6	15.7	15.8	15.3	15.9
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21.5	17.0	17.7	18.3	18.7	19.1	19.5	19.8	20.0	20.2	20.4	20.0	21 2	21 4	21.5	21.6	21.7	21.8	21.8	21.9	21.4	21.9
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27.0																					
27.5	22.8	23.7	24.4	24.9	25.4	25.8	26.1	26.4	26.6	26.8	27.0	27.1	27.2	27.3	27.4	Z/.4	27.5	21.5	21.3	41.0	27.5

1.0	STUMP DOB	0.0	0.2	0.4	0.6	0.8					HE I GH'		FEET 2.2		2,6				3.4	3,6	3.8	4.0
6.0																						
6.49																						
7.5	6.5	4.3	4.7	5.0	5.2		5.5															
8.40																						
1.00																						
9.5 6.2 6.7 7.1 7.4 7.9 7.7 7.9 8.1 8.3 8.4 8.5 8.7 8.8 8.0 8.0 8.0 7.0 7.0 7.2 7.8 8.9 8.0 8.0 9.0 9.0 9.0 9.0 9.0 9.0 9.0 9.0 9.0 9		_																8.2		8.3	8 . 4	8.4
10.0																						
11.0 7.0 7.6 8.1 8.2 8.8 8.8 9.1 9.2 9.5 9.7 9.8 10.0 10.1 10.2 10.3 10.4 10.5 10.6 10.5 10.6 71.0 1.7 10.8 10.8 10.7 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5						8.0	8.3	8.5	8.7	8.8	9.0	9.1	9.2	9.3	9.4	9.5	9.6	9.6	9.7	9.8	9.8	9.9
11.5 7, 3 7, 9 8, 8, 8, 9, 2 9, 4 9, 7 9, 6 10, 1 10, 2 10, 2 10, 2 10, 1 10, 2 10, 1 10, 2 10, 1 10, 2 10, 1 10, 2 10, 2 10, 2 10, 2 10, 2 10, 2 10, 3 10, 3 11,																						
12.5 7.9 6.5 9.1 9.5 9.1 9.5 9.7 10.2 10.5 10.7 10.9 11.1 11.3 11.4 11.5 11.7 11.6 11.9 12.0 12.1 12.5 12.5 12.5 12.5 13.5 13.0 13.1 13.0 13.1 12.5 12.5 12.5 12.5 12.5 12.5 12.5 13.5 13.0 13.1 13.0 13.1 12.5 12.5 12.5 12.5 12.5 12.5 12.5 12	11.5	7.3	7.9	8.4	8.8	9.2	9.4	9.7	9.9	10.1	10.2	10.4	10.5	10.7	10.8	10.9	11.0	11.0	11.1	11.2	11.3	11.3
13.0							9.8	10.1	10.3	10.5	10.7	10.8	11.0	11.1	11.2	11.3	11.4	11:5	11.6	11.7	11.8	11.8
14-0	13.0			9.4	9.9	10.3	10.6	10.9	11.1	11.3	11.5	11.7	11.8	12.0	12.1	12.2	12.3	12.5	12.6	12.6	12.7	12.8
14-29				9.7	10.2	10.6	10.9	11.2	11.5	11.7	11.9	12.1	12.3	12.4	12.6	12.7	12.8	12.9	13.0	13.1	13.2	13.3
15.5 9.4 10.3 11.0 11.3 12.0 12.4 12.6 13.1 13.2 13.6 14.0 14.2 14.3 14.5 14.6 14.8 14.9 15.1 13.2 13.6 15.7 15.0 15.0 15.1 15.2 15.0 15.0 15.1 15.2 15.0 15.0 15.1 15.2 15.0 15.0 15.1 15.2 15.0 15.0 15.1 15.2 15.0 15.0 15.1 15.2 15.0 15.1 15.2 15.0 15.1 15.2 15.0 15.1 15.2 15.0 15.1 15.2 15.0 15.1 15.2 15.0 15.1 15.2 15.0 15.1 15.2 15.0 15.1 15.2 15.0 15.1 15.2 15.0 15.1 15.2 15.0 15.2 15.2 15.2 15.2 15.2 15.2 15.2 15.2	14.5	8.9	9.7	10.4	10.9	11.3	11.7	12.0	12.3	12.5	12.8	13.0	13.1	13.3	13.5	13.6	13.7	13.8	14.0	14.1	14.2	14.3
16.0 9.7 10.6 11.3 11.9 12.4 12.8 13.1 13.4 13.7 14.0 14.2 14.4 14.6 14.8 14.9 15.1 15.2 15.4 15.5 15.2 15.4 15.5 15.7 17.7 17.7 17.7 17.7 17.7 17.7		9.2	10.0	10.7	11.2	11.7	12.1	12.4	12.7	12.9	13.2	13.4	13.6	13.7	13.9	14.0	14.2	14.3	14.4	14.6	14.7	14.8
10-5	- ·	9.7	10.6	11.3	11.9	12.4	12.8	13.1	13.4	13.7	14.0	14.2	14.0	14.2	14.5	14.9	15.1	14.8	15.4	15.5	15.6	15.7
17-5		9.9	10.9	11.6	12.2	12.7	13.1	13.5	13.8	14.1	14.4	14.6	14.8	15.0	15.2	15.4	15.5	15.7	15.8	16.0	16.1	16.2
18.0 10.7 11.7 12.5 13.2 13.7 14.2 14.6 15.0 15.0 15.2 15.7 15.0 15.8 16.1 16.3 16.3 16.5 16.7 17.0 17.6 17.1 17.2 17.4 17.5 17.5 17.6 16.3 16.5 16.7 17.0 17.6 17.0 17.6 17.1 17.2 17.4 17.5 17.7 17.6 17.6 18.2 17.1 17.6 17.6 18.2 17.5 17.6 18.2 17.5 17.6 17.6 18.2 17.5 17.6 18.2 17.5 17.6 18.2 17.5 17.6 18.2 17.5 17.6 17.6 18.2 17.5 17.6 18.2 17.5 17.6 17.6 17.5 17.7 17.6 17.6 18.2 18.2 18.2 18.6 18.2 18.2 18.2 18.6 18.2 18.2 18.2 18.2 18.2 18.6 18.2 18.2 18.2 18.2 18.2 18.2 18.2 18.2		10.4	11.4	12.2	12.8	13.4	13.8	14.2	14.6	14.9	15.2	15.4	15.7	15.9	15.7	16.3	16.5	16.2	16.8	16.4	17.1	17.2
19.5 11.1 12.2 13.1 13.8 14.4 14.7 15.3 15.7 16.1 16.4 16.7 16.7 17.9 17.2 17.4 17.6 17.8 18.0 18.2 18.3 18.5 18.5 19.5 19.5 11.9 19.5 11.4 12.5 13.4 14.1 14.7 15.2 15.7 16.1 16.4 16.4 16.8 17.7 17.5 17.7 18.0 17.8 18.0 18.7 18.9 19.1 19.3 19.4 19.5 11.9 19.1 19.3 19.4 19.5 11.9 19.5 11.4 12.5 13.4 18.0 18.5 18.5 18.5 18.5 18.5 18.5 18.5 18.5		10.7	11.7	12.5	13.2	13.7	14.2	14.6	15.0	15.3	15.6	15.8	16.1	16.3	16.5	16.7	16.9	17.1	17.2	17.4	17.5	17.7
1945 11.4 12.5 13.4 14.1 1.7 15.2 15.7 16.1 16.4 16.8 17.1 17.3 17.6 17.8 18.0 18.2 18.4 18.6 18.8 19.0 19.1 19.1 19.1 19.1 19.1 19.1 19.1		11.1	12.0	13.1	13.8	14.4	14.9	15.3	15.7	15.7	16.4	16.7	16.5	16.7	17.0	17°,2	17.4	17.5	17.7	17.9	18.0	18.2
20.5 11.6 13.0 13.9 14.7 15.3 15.9 16.6 17.2 17.5 17.9 18.2 18.4 18.7 18.9 19.1 19.3 19.5 19.7 19.9 20.1 11.0 12.0 13.2 14.2 15.0 13.7 16.2 16.1 17.0 17.9 18.3 18.6 18.8 18.1 19.4 19.5 19.1 19.3 19.5 19.7 19.9 20.1 12.0 12.0 13.2 14.2 15.0 13.7 18.2 18.4 18.7 18.9 19.1 19.3 19.5 19.5 19.7 19.9 20.1 12.0 12.0 12.0 12.0 13.2 14.7 15.0 16.3 16.9 17.5 17.9 18.3 18.7 18.8 18.1 19.4 19.5 20.0 20.7 20.5 20.7 20.5 20.1 12.0 12.0 12.0 12.0 12.0 12.0 12.0		11.4	12.5	13.4	14.1	14.7	15,2	15.7	16.1	16.4	16.8	17.1	17.3	17.6	17.8	18.0	18.2	18.4	18.6	18.8	19.0	19.1
21.0 12.0 13.2 14.2 15.0 15.7 16.2 16.7 17.2 17.6 17.9 18.3 18.6 18.8 19.1 19.1 19.6 19.8 20.0 20.2 20.4 20.6 21.1 15.1 15.1 15.1 15.1 15.1 15.1 16.1 16		11.8	13.0	13.6	14.4	15.0	15.6	16.4	16.8	16.8	17.2	17.5	17.7	18.0	18.3	18.5	18.7	18.9	19.1	19.3	19.4	19.6
22.0 12.7 13.7 14.7 15.6 16.3 16.9 17.4 17.9 18.3 18.7 19.0 19.4 19.7 20.0 20.2 20.5 20.7 20.9 21.1 21.3 21.5 22.5 22.5 21.7 14.0 15.0 15.0 15.9 16.0 17.2 17.8 18.2 18.7 19.1 19.4 19.8 20.7 20.8 21.1 20.4 20.0 21.2 21.8 21.8 22.0 22.5 21.7 14.0 15.0 15.0 15.9 16.0 17.1 18.4 19.0 19.0 19.5 19.8 20.7 20.8 20.8 20.8 20.1 20.9 21.2 21.8 22.8 22.3 22.3 22.3 22.3 22.3 22.3 22	21.0	12.0	13.2	14.2	15.0	15.7	16.2	16.7	17.2	17.6	17.9	18.3	18.6	18.8	19.1	19.4	19.6	19.8	20.0	20.2	20.4	20.6
22.5 12.7 14.0 15.0 15.9 16.0 17.2 17.8 18.2 18.7 19.1 19.4 19.8 20.1 20.4 20.5 20.8 20.1 21.3 21.6 21.8 22.0 23.0 23.0 12.7 14.2 15.2 18.2 18.2 19.8 20.8 20.8 20.8 20.8 20.8 20.8 20.8 20		12.5	13.7	14.7	15.6	16.0	16.6	17.1	17.5	17.9	18.3	18.7	19.0	19.3	19.5	19.8	20.0	20.3	20.5	20.7	20.9	21.1
23.5 13.1 14.5 15.5 16.4 17.2 17.9 18.4 19.0 19.4 19.8 2n.2 20.6 20.9 21.3 21.0 21.9 22.2 22.5 22.8 23.9 23.2 23.5 23.4 23.5 23.5 13.3 14.7 13.8 16.7 17.5 18.2 18.6 19.4 20.1 20.6 21.0 21.6 21.0 21.3 21.0 21.9 22.2 22.5 22.2 22.3 22.3 22.3 22.5 23.5 23	22.5	12.7	14.0	15.0	15.9	16.6	17.2	17.8	18.2	18.7	19.1	19.4	19.8	20.1	20.4	20.6	20.9	21.2	21.4	21.6	21.8	22.0
24.5 13.5 14.7 15.8 16.7 17.5 18.2 18.8 19.3 19.8 20.2 20.6 21.0 21.3 21.0 21.7 22.1 22.5 22.5 22.7 23.0 23.2 23.5 23.7 23.9 24.2 24.5 13.5 14.9 16.1 17.0 17.8 18.5 19.1 19.6 20.1 20.6 21.0 21.4 21.7 22.1 22.5 22.8 23.1 23.4 23.7 23.9 24.2 24.5 23.5 13.7 13.4 18.5 19.1 19.4 20.0 20.5 21.0 21.4 21.8 22.1 22.5 22.8 23.2 23.8 23.8 23.7 23.9 24.2 24.5 23.5 13.8 13.4 18.6 19.5 19.1 19.1 19.8 20.2 20.9 21.3 21.8 22.2 22.8 22.9 23.2 23.5 23.8 24.1 24.4 24.6 24.9 24.5 24.5 24.8 23.1 23.4 23.7 23.9 24.2 24.8 23.1 23.4 23.7 23.9 24.2 24.8 23.1 23.8 23.7 23.9 24.2 24.8 23.1 23.8 23.7 23.9 24.2 24.8 23.1 23.8 23.7 23.9 24.2 24.8 23.1 23.8 23.7 23.9 24.2 24.8 23.1 23.8 23.7 23.9 24.2 24.8 23.1 23.8 23.7 24.1 24.8 24.8 23.1 23.8 23.7 23.9 24.2 24.8 23.1 23.8 23.7 23.9 23.8 23.8 23.8 23.8 23.8 23.8 23.8 23.8		12.9	14.5	15.3	16.2	16.9	17.5	18.1	18.6	19.0	19.5	19.8	20.2	20.5	20.8	21.1	21.3	21.6	21.8	22.1	22.3	22.5
24.5 13.5 14.9 16.1 17.0 17.8 18.5 19.1 19.6 20.1 20.6 21.0 21.4 21.7 22.1 22.4 22.7 22.9 23.2 23.5 23.7 23.9 24.2 24.8 25.5 13.9 15.1 16.3 17.3 18.1 18.8 19.4 20.0 20.5 21.0 21.4 21.7 22.1 22.4 22.7 22.8 23.1 23.4 23.7 23.9 24.2 24.8 25.5 13.9 15.4 16.6 17.8 18.4 19.1 19.8 20.3 20.9 21.3 21.8 22.2 22.5 22.9 23.2 23.5 23.8 24.1 24.4 24.6 24.9 24.0 24.8 21.5 21.8 21.8 21.8 21.8 21.8 21.8 21.8 21.8	24.0	13.3	14.7	15.8	16.7	17.5	18.2	18.8	19.3	19.8	20.2	20.6	21.0	21.3	21.6	21.9	22.2	22.5	22.7	23.0	23.2	23.5
25.5 13.9 15.4 16.6 17.6 18.4 19.1 19.8 20.3 20.9 21.3 21.8 22.2 22.5 22.9 23.2 23.5 23.8 24.1 24.4 24.7 25.0 25.3 25.6 26.0 12.1 15.6 16.8 17.8 18.7 19.4 20.1 20.7 21.2 21.7 22.1 22.5 22.9 23.3 23.7 24.1 24.4 24.7 25.0 25.3 25.6 25.9 27.0 14.2 15.0 16.8 17.1 18.1 19.0 19.7 20.4 21.0 21.6 22.1 22.5 22.9 23.3 23.7 24.1 24.5 24.8 25.1 25.8 26.1 25.3 25.6 25.9 27.0 14.1 10.0 17.3 18.4 19.3 20.0 20.7 21.3 21.9 22.4 22.9 23.3 23.7 24.1 24.5 24.8 22.5 1 25.8 26.1 25.3 25.6 25.9 27.0 14.8 10.0 17.3 18.4 19.3 20.0 20.7 21.3 21.9 22.4 22.9 23.3 23.7 24.1 24.5 24.8 25.1 25.8 26.2 26.1 26.3 27.0 27.1 24.5 24.8 25.1 25.8 26.1 26.3 26.1 26.3 27.0 27.1 24.5 24.8 25.1 25.8 26.1 26.3 26.1 26.3 27.0 27.1 24.5 24.8 25.1 25.8 26.1 26.3 26.1 26.3 27.0 27.1 24.5 24.8 25.1 25.8 26.2 26.1 26.3 27.0 27.1 24.5 24.8 25.1 25.8 26.1 26.5 26.1 26.5 26.9 27.3 27.8 28.2 26.1 26.3 27.0 27.1 24.5 24.8 25.1 25.8 26.1 26.5 26.9 27.3 27.8 28.2 27.5 27.3 28.2 27.2 27.3 27.8 28.2 27.2 27.2 27.2 27.2 27.2 27.2		13.5	14.9	16.1	17.0	17.8	18.5	19.1	19.6	20.1	20.6.	21.0	21.4	21.7	22.1	22.4	22.7	22.9	23.2	23.5	23.7	23.9
26.5 14.2 13.8 17.1 18.1 19.0 19.7 20.4 21.0 21.6 22.1 22.5 22.0 23.3 23.7 24.1 24.5 24.8 25.1 25.5 25.8 26.1 26.3 27.5 14.4 10.0 17.3 18.4 19.3 20.0 20.7 21.3 21.9 21.4 22.4 22.9 23.3 23.7 24.1 24.5 24.8 25.3 25.0 25.9 26.2 26.5 26.8 27.5 14.6 10.2 17.5 18.6 19.5 20.3 21.0 21.7 22.3 27.6 23.1 23.6 24.1 24.5 24.9 25.3 25.0 25.9 26.2 26.5 26.8 26.0 14.8 10.4 17.8 18.9 19.4 20.6 21.4 22.0 22.6 23.1 23.6 24.1 24.5 24.9 25.3 25.7 26.0 26.4 26.7 27.0 27.3 28.5 14.9 10.6 18.0 19.1 20.1 20.9 21.7 72.3 22.9 23.5 24.0 24.5 24.9 25.3 25.7 26.1 26.5 26.8 27.1 27.5 27.8 28.5 14.9 10.6 18.0 19.1 20.1 20.9 21.7 22.3 22.9 23.5 24.0 24.5 24.9 25.3 25.7 26.1 26.5 26.8 27.1 27.5 27.8 27.0 27.9 27.0 11.1 10.8 18.2 19.4 20.4 21.2 22.0 22.6 23.3 24.0 24.5 24.7 25.2 25.7 26.1 26.6 27.0 27.3 27.7 28.1 28.4 28.7 28.0 20.0 13.3 11.0 18.5 19.0 20.6 21.5 22.3 23.0 23.6 24.2 24.7 25.2 25.7 26.1 26.6 27.0 27.3 27.7 28.1 28.4 28.7 28.3 11.5 17.6 18.9 20.1 21.2 22.1 22.9 23.5 24.0 24.6 25.1 25.6 26.1 27.0 27.0 27.0 27.3 27.7 28.1 28.4 28.7 28.3 11.5 17.6 19.1 20.4 21.4 22.4 23.2 23.9 24.6 25.2 25.2 26.0 26.5 26.9 27.4 27.8 28.1 28.6 29.0 29.3 29.7 29.3 13.0 13.5 17.4 18.9 20.1 21.2 22.1 22.9 23.6 24.3 24.9 25.2 26.0 26.5 26.9 27.4 27.8 28.1 28.6 29.0 29.3 29.7 29.3 13.0 13.5 17.4 18.9 20.1 21.2 22.1 22.9 23.6 24.3 24.9 25.2 26.0 26.5 26.9 27.3 27.8 28.2 28.6 29.0 29.3 29.7 29.3 29.0 20.0 20.5 20.0 26.5 26.9 27.4 27.8 28.1 28.6 29.0 29.3 29.3 20.0 26.0 26.5 26.0 26.5 26.9 27.4 27.8 28.1 28.6 29.0 29.3 29.3 20.0 20.5 21.5 26.0 26.5 26.9 27.3 27.8 28.2 28.6 29.0 29.3 29.3 20.0 20.5 21.5 26.0 26.5 26.9 27.3 27.8 28.2 28.6 29.0 29.3 29.3 20.0 20.0 20.0 20.0 20.0 20.0 20.0 20	25.5	13.9	15.4	16.6	17.6	18.4	19.1	19.8	20.3	20.9	21.3	21.8	22.2	22.5	22.9	23.2	23.5	23.8	24.1	24.4	24.6	24.9
27.0 14.4 10.0 17.3 18.4 19.3 20.0 20.7 21.3 21.9 22.4 22.9 23.5 23.7 24.1 24.5 24.8 25.1 25.5 25.8 26.1 26.3 27.5 14.6 10.2 17.5 18.6 19.5 20.3 21.0 21.7 22.3 22.8 23.3 23.7 24.1 24.5 24.9 25.3 25.6 25.9 26.2 26.5 26.8 28.0 14.8 10.4 17.5 18.6 19.1 20.1 20.9 21.7 22.3 22.9 23.5 24.0 24.5 24.5 24.9 25.3 25.7 26.1 26.5 26.8 26.7 27.3 27.8 29.0 15.1 16.8 18.2 19.4 20.1 20.9 21.7 22.3 22.9 23.5 24.0 24.5 24.5 24.5 25.3 25.7 26.1 26.5 26.9 27.3 27.6 27.9 28.2 29.5 15.1 16.8 18.2 19.4 20.4 21.2 22.0 22.7 23.3 23.8 24.4 24.9 25.3 25.7 26.1 26.6 27.0 27.3 27.6 27.9 28.2 29.5 15.1 17.4 18.5 19.6 20.6 21.5 22.3 23.0 23.6 24.2 24.7 25.2 25.8 26.1 26.5 27.0 27.3 27.7 28.1 28.4 28.7 29.5 15.4 17.2 18.7 19.9 20.9 21.8 22.6 23.3 24.0 24.6 25.1 25.6 26.0 26.5 27.0 27.4 27.8 28.1 28.5 28.9 29.2 27.3 1.0 15.4 17.2 18.7 20.1 21.2 22.1 22.9 23.6 24.3 24.9 25.5 26.0 26.5 26.0 27.4 27.4 28.2 28.2 28.0 29.0 29.4 29.8 30.1 15.1 17.4 18.9 20.1 21.7 22.7 23.5 24.3 25.0 25.6 26.7 27.3 27.7 28.2 28.6 29.1 29.5 29.9 30.3 30.1 23.1 15.1 17.4 18.9 3 20.6 21.7 22.7 23.5 24.3 25.0 25.6 26.3 26.7 27.3 27.7 28.2 28.6 29.1 29.5 29.9 30.3 30.7 31.1 31.5 17.4 18.9 20.6 21.7 22.7 23.5 24.3 25.0 25.6 26.3 26.7 27.3 27.7 28.2 28.6 29.1 29.5 29.9 30.3 30.7 31.1 31.5 19.1 19.1 19.1 19.3 20.6 21.7 22.7 23.5 24.3 25.0 26.6 26.3 26.7 27.3 27.7 28.2 28.6 29.1 29.5 29.9 30.3 30.7 31.1 32.5 16.2 18.2 19.7 21.1 22.2 23.2 24.9 25.6 26.3 25.7 27.5 27.5 28.4 29.0 29.9 30.4 30.8 31.2 31.6 32.0 33.5 33.3 34.0 34.0 34.2 31.2 31.6 32.0 33.5 33.5 33.5 33.8 34.6 32.0 34.2 31.2 31.6 32.0 33.5 33.5 33.5 33.8 34.6 32.8 34.0 34.2 31.0 33.5 33.5 33.8 34.6 32.8 34.2 34.2 34.2 34.2 34.2 34.2 34.2 34.2		14.1	15.6	16.8	17.8	18.7	19.4	20.1	20.7	21.2	21.7	22 • 1	22.5	22.9	23.3	23.6	24.0	24.3	24.6	24.8	25.1	25.4
27.5 14.6 16.2 17.5 18.6 19.5 20.3 21.0 21.7 22.3 27.8 23.3 23.7 24.1 24.5 24.9 25.3 25.0 25.9 26.2 26.5 26.8 28.0 14.8 16.4 17.8 18.9 19.4 26.0 21.4 22.0 22.0 23.1 23.6 24.1 24.5 24.9 25.3 25.7 26.0 26.4 26.7 27.0 27.3 28.5 14.9 16.0 18.0 19.1 20.1 20.9 21.7 22.3 22.9 23.5 24.0 24.5 24.9 25.3 25.7 26.1 26.5 26.8 27.1 27.5 27.8 28.5 14.9 16.0 18.0 19.1 20.1 20.9 21.7 22.3 22.9 23.5 24.0 24.5 24.9 25.3 25.7 26.1 26.5 26.8 27.1 27.5 27.8 29.5 13.3 17.0 18.5 19.0 20.6 21.5 22.3 23.0 23.6 24.2 24.7 25.2 25.7 26.1 26.6 27.0 27.3 27.7 28.1 28.4 28.7 29.3 13.3 17.0 18.5 19.0 20.6 21.5 22.3 23.0 23.6 24.2 24.7 25.2 25.7 26.1 26.6 27.0 27.3 27.7 28.1 28.4 28.7 29.3 13.5 17.2 18.7 19.9 20.9 21.8 22.6 23.3 24.0 24.6 25.1 25.6 26.1 25.6 27.0 27.4 27.8 28.1 28.6 28.0 29.0 29.3 20.7 31.5 15.7 17.0 19.1 20.1 21.2 22.4 22.9 24.3 24.0 24.6 25.1 25.6 26.1 25.6 26.9 27.0 27.8 28.2 28.6 29.0 29.3 20.7 31.5 15.7 17.0 19.1 20.0 21.7 22.7 23.5 24.3 25.9 25.5 26.5 26.9 27.7 27.6 28.8 28.0 28.0 26.0 26.5 26.9 27.4 27.8 28.1 28.6 28.0 29.0 29.3 20.7 31.5 15.7 17.0 19.1 20.0 20.1 21.7 22.7 23.5 24.3 25.9 25.5 26.5 26.5 27.1 27.0 27.8 28.1 28.6 29.0 29.9 20.3 30.7 31.5 15.7 17.0 19.1 20.0 20.8 22.0 22.9 23.8 24.6 25.3 25.9 26.5 27.1 27.0 27.8 28.1 28.6 29.1 29.5 29.9 30.3 30.7 30.1 32.5 16.0 26.0 18.0 19.5 20.8 22.0 22.9 23.8 24.6 25.3 25.9 26.5 27.1 27.6 28.1 28.6 29.1 29.5 29.9 30.3 30.7 30.1 30.1 30.1 30.1 30.0 30.0 30.2 30.8 31.2 31.6 32.0 30.3 31.2 31.6 32.0 30.0 30.1 30.1 30.0 30.0 30.8 31.2 31.6 32.0 30.0 30.1 30.1 30.0 30.0 30.8 31.2 31.7 32.1 32.6 33.3 33.5 33.9 34.5 34.9 34.0 34.0 34.0 34.0 34.0 34.0 34.0 34.0		14.4	16.0	17.3	18.4	19.3	20.0	20.7	21.3	21.9	22.4	22.9	23.3	23.7	24.1	24.5	24.8	25.1	25.5	25.8	26.1	26.3
28.5 14.9 10.6 18.0 19.1 20.1 20.9 21.7 22.3 22.9 23.5 24.0 24.5 24.9 23.3 25.7 26.1 26.5 26.8 27.1 27.5 27.8 27.9 29.5 15.1 10.8 18.2 19.4 20.4 21.1 22.0 22.7 23.3 23.8 24.4 24.4 24.9 25.2 25.7 26.1 26.5 26.5 26.9 27.7 27.8 27.6 27.9 28.2 29.5 15.3 17.0 18.5 19.6 20.0 21.5 22.3 23.0 23.6 24.2 24.7 25.2 25.7 26.1 26.5 27.0 27.4 27.8 28.1 28.4 28.7 29.2 30.5 15.4 17.1 18.9 20.1 21.2 22.1 22.9 23.6 24.0 24.6 25.1 25.6 26.9 27.4 27.8 28.2 28.6 29.0 29.3 29.7 31.0 15.6 17.4 18.9 20.1 21.2 22.1 22.9 23.6 24.3 24.9 25.5 26.0 26.5 26.9 27.4 27.8 28.2 28.6 29.0 29.3 29.7 31.0 15.7 17.6 19.1 20.4 21.2 22.4 23.2 24.0 4.6 25.2 25.8 26.4 26.9 27.1 27.5 27.8 28.2 28.6 29.0 29.3 29.7 31.0 15.9 17.8 19.3 20.6 21.7 22.7 23.5 24.0 25.3 25.9 26.5 27.1 27.5 27.8 28.2 28.6 29.0 29.4 29.8 30.1 32.5 16.0 18.0 19.5 20.8 22.0 22.0 23.8 24.6 25.2 25.8 25.0 26.5 27.1 27.6 28.1 28.6 29.1 29.5 29.9 30.3 30.7 31.1 32.5 16.2 18.2 29.7 21.2 12.2 23.2 24.1 24.9 25.5 26.0 26.5 27.1 27.6 28.1 28.6 29.9 1.9 1.5 29.5 29.9 30.3 30.7 31.1 32.5 16.2 18.2 19.7 21.1 22.2 23.2 24.1 24.9 25.5 26.0 26.5 27.1 27.5 28.0 28.5 29.0 29.5 29.9 30.3 30.8 31.2 31.6 32.0 33.0 33.0 33.0 33.0 33.0 33.0 33.0		14.6	16.2	17.5	18.6	19.5	20.3	21.0	21.7	22.3	27.8	23.3	23.7	24.1	24.5	24.9	25.3	25.6	25.9	26.2	26.5	26.8
29.5 15.1 16.8 18.2 19.4 20.4 21.2 22.0 22.7 23.3 23.8 24.4 24.9 25.3 25.7 26.1 26.5 26.9 27.3 27.6 27.9 28.2 29.5 30.0 15.4 17.2 18.7 19.9 20.9 21.8 22.6 23.3 24.0 24.6 25.1 25.6 26.1 26.5 27.0 27.4 27.8 28.1 28.5 28.9 29.2 30.5 15.4 17.2 18.7 19.9 20.9 21.8 22.6 23.3 24.0 24.6 25.1 25.6 26.1 26.5 27.0 27.4 27.8 28.1 28.6 29.0 29.3 29.7 31.0 15.5 17.4 18.9 20.1 21.2 22.1 22.9 23.6 24.3 24.9 24.6 25.1 25.6 26.1 26.5 27.0 27.4 27.8 28.2 28.6 29.0 29.3 29.7 31.0 15.5 17.4 18.9 20.1 21.2 22.1 22.9 23.6 24.3 24.9 24.6 25.1 25.6 26.1 26.5 26.9 27.4 27.8 28.2 28.6 29.0 29.4 29.8 30.1 31.5 15.7 17.6 19.1 20.4 21.4 22.4 23.2 23.9 24.6 25.2 25.8 26.4 26.9 27.3 27.7 28.1 28.6 29.0 29.4 29.8 30.1 31.5 15.7 17.6 19.1 20.4 21.4 22.4 23.2 23.9 24.6 25.3 25.9 26.5 27.1 27.6 28.1 28.6 29.1 29.5 29.9 30.3 30.7 31.1 32.5 31.0 16.0 18.0 19.5 20.8 22.0 22.9 23.8 24.6 25.3 25.9 26.5 27.1 27.6 28.1 28.6 29.1 29.5 29.9 30.3 30.7 31.1 32.5 31.0 32.5 31.0 31.0 19.5 20.8 22.0 22.9 23.8 24.6 25.3 25.9 26.6 27.3 27.8 28.4 28.9 29.4 29.5 29.9 30.4 30.8 31.2 31.6 31.2 31.6 31.2 31.6 31.2 31.6 32.0 33.5 31.2 31.7 32.1 32.6 33.5 31.2 31.6 31.2 31.6 32.0 33.5 31.2 31.6 32.5 33.5 34.5 34.5 34.5 34.5 34.5 34.5 34		14.9	16.6	18.0	19.1	20.1	20.9	21.7	22.3	22.9	23.5	24.0	24.5	24.9	25.3	25.7	26.1	26.5	26.8	27.1	27.5	27.8
30.0 15.4 17.2 18.7 19.9 20.9 21.8 22.6 23.3 24.0 24.6 25.1 25.6 26.1 26.5 27.0 27.4 27.8 28.1 28.5 28.6 29.0 29.3 29.7 31.0 15.5 17.4 18.9 20.1 21.2 22.1 22.9 23.6 24.3 24.9 24.6 25.5 26.0 26.5 26.9 27.4 27.8 28.2 28.6 29.0 29.4 29.8 30.1 31.5 15.7 17.6 19.1 20.4 21.4 22.4 23.2 23.9 24.6 25.2 25.8 26.4 26.9 27.3 27.6 28.2 28.6 29.0 29.4 29.8 30.1 31.5 15.7 17.6 19.3 20.6 21.7 22.7 23.5 24.6 25.0 25.6 26.5 26.1 26.5 27.0 27.4 27.8 28.2 28.6 29.0 29.4 29.8 30.1 31.5 15.7 17.6 19.3 20.6 21.7 22.7 23.5 24.6 25.3 25.9 26.5 27.1 27.6 28.1 28.6 29.1 29.5 29.9 30.3 30.7 31.1 32.5 16.2 18.2 19.7 21.1 22.2 23.2 24.1 24.9 25.5 26.6 26.5 27.0 27.5 28.5 28.5 29.0 29.5 29.9 30.3 30.7 31.1 32.5 16.2 18.2 18.0 19.5 20.0 21.5 22.0 23.5 24.1 24.9 25.6 26.3 27.0 27.6 28.2 28.5 29.0 29.5 29.9 30.4 30.8 31.2 31.6 32.0 33.5 16.3 18.3 20.0 21.3 22.5 23.5 24.4 25.5 26.4 27.5 25.6 26.3 27.0 27.6 28.2 28.4 29.3 29.8 30.3 30.8 31.2 31.7 32.1 32.5 33.5 34.5 34.5 34.5 34.5 34.5 34.5 34		15.1	16.8	18.2	19.4	20.4	21.2	22.0	22.7	23.3	23.8	24.4	24.9	25.3	25.7	26.1	26.5	26.9	27.3	27.6	27.9	28.2
30.5 15.6 17.4 18.9 20.1 21.2 22.1 22.9 23.6 24.3 24.9 25.5 26.0 26.5 26.9 27.4 27.8 28.2 28.6 29.0 29.3 29.7 31.0 15.7 17.6 19.1 20.4 21.4 22.4 23.2 23.9 24.6 25.2 25.8 26.0 26.0 27.3 27.7 28.2 28.2 28.6 29.0 29.2 29.8 30.1 31.5 15.9 17.8 19.3 20.6 21.7 22.7 23.5 24.3 25.0 25.6 26.2 26.7 27.3 27.7 28.2 28.2 28.6 29.1 29.5 29.9 30.3 30.6 32.0 16.0 15.0 19.5 20.8 22.0 22.9 23.8 24.6 25.3 25.9 26.5 27.1 27.6 28.1 28.6 29.1 29.5 29.9 30.3 30.7 31.1 32.5 16.2 18.2 19.7 21.1 22.2 23.2 24.1 24.9 25.6 26.3 26.9 27.3 27.6 28.4 28.9 29.0 29.5 29.9 30.4 30.8 31.2 31.6 32.0 33.0 16.3 18.3 20.0 21.3 22.5 23.5 24.4 25.5 25.9 26.6 27.3 27.6 28.2 28.8 29.3 29.8 30.3 30.8 31.2 31.7 32.1 32.3 34.0 16.5 18.5 20.2 21.5 22.7 23.8 24.7 25.5 26.3 27.0 27.6 28.2 28.8 29.3 29.8 30.3 30.8 31.2 31.7 32.1 32.6 33.0 34.0 16.5 18.5 20.2 21.5 22.7 23.8 24.7 25.2 26.6 27.3 27.6 28.2 28.8 29.3 29.8 30.3 30.8 31.2 31.7 32.1 32.6 33.0 34.0 16.7 18.8 20.5 22.0 23.2 24.3 25.2 26.1 26.9 27.6 28.3 28.9 29.5 30.1 30.6 31.2 31.6 32.1 32.6 33.0 33.5 34.0 34.6 16.9 19.0 20.7 22.2 23.4 24.5 25.5 26.4 27.2 28.8 28.8 29.9 29.5 30.1 30.6 31.2 31.6 32.1 32.6 33.0 33.5 34.0 34.0 34.0 34.0 34.0 34.0 34.0 34.0	-	15.4	17.2	18.7	19.9	20.9	21.8	22.6	23.3	24.0	24.6	25.1	25.6	26.1	26.5	27.0	27.4	27.8	28.1	28.5	28.4	28.7
31.5		15.6	17.4	18.9	20.1	21.2	22.1	22.9	23.6	24.3	24.9	25.5	26.0	26.5	26.9	27.4	27.8	28.2	28.6	29.0	29.3	29.7
12.0 16.0 18.0 19.5 20.8 22.0 22.9 23.8 24.6 25.3 25.9 26.5 27.1 27.6 28.1 28.6 29.1 29.5 29.9 30.4 30.8 31.2 31.6 32.1 33.0 16.2 18.2 19.7 21.1 22.2 23.2 24.1 24.9 25.6 26.3 27.0 27.6 28.0 28.5 29.0 29.5 29.0 29.5 29.9 30.4 30.8 31.2 31.6 32.1 33.5 16.3 18.3 20.0 21.3 22.5 22.7 23.8 24.7 25.5 26.3 27.0 27.6 27.6 28.8 29.3 29.8 30.3 30.8 31.2 31.7 32.1 32.5 34.0 16.5 18.5 20.2 21.5 20.2 21.5 22.7 23.8 24.7 25.5 26.3 27.0 27.6 28.6 29.9 29.5 30.1 30.6 31.2 31.6 32.1 31.7 32.1 32.5 34.0 16.5 18.5 20.5 22.0 72.0 23.2 24.3 25.2 26.1 26.9 27.6 28.3 28.9 29.5 30.1 30.6 31.2 31.6 32.1 32.6 33.0 33.5 33.9 34.5 31.7 32.1 32.6 33.0 33.5 33.0 34.5 31.6 32.1 32.6 32.1 32.6 33.0 33.5 33.5 33.5 33.0 34.5 20.9 24.2 23.7 24.8 25.8 26.1 27.0 27.8 28.6 29.3 29.9 30.5 31.0 31.6 32.1 32.6 33.0 33.5 33.9 33.5 33.9 34.9 34.0 34.0 34.0 34.0 34.0 34.0 34.0 34.0		15.9	17.8	19.3	20.4	21.7	22.7	23.5	24.3	25.0	25.6	26.2	26.7	27.3	27.7	28.2	28.2	28.6	29.5	29.4	29·8 30.3	30.1
33.5 16.5 18.5 20.2 21.5 22.7 23.8 24.7 25.5 26.8 27.7 27.6 28.5 28.8 29.8 29.3 29.8 30.3 30.8 31.2 31.7 32.1 32.5 34.0 16.5 18.5 20.2 21.5 22.7 23.8 24.7 25.5 26.8 27.7 28.0 28.6 29.3 29.8 30.1 30.6 31.2 31.7 32.1 32.5 33.0 34.5 31.0 31.0 31.0 31.0 31.2 31.7 32.1 32.6 33.0 34.5 31.0 31.0 31.0 31.0 31.0 31.0 31.0 31.0		16.0	18.0	19.5	20.8	22.0	22.9	23.8	24.6	25.3	25.9	26.5	27.1	27.6	28.1	28.6	29.1	29.5	29.9	30.3	30.7	31.1
33.5		16.3	18.3	20.0	21.3	22.5	23.5	24.4	25.2	25.9	26.6	27.3	27.8	28.4	28.9	29.4	29.9	30.4	30.8	31.2	31.6	32.0
34.5 16.7 18.8 20.5 22.0 23.2 24.3 25.2 26.1 26.9 27.6 28.3 28.9 29.5 30.1 30.6 31.2 31.6 32.1 32.6 33.0 33.5 33.0 33.5 35.5 16.9 19.0 20.7 22.2 23.4 24.5 25.5 26.4 27.2 28.0 28.6 29.3 29.9 30.5 31.0 31.6 32.1 32.6 33.0 33.5 34.0 34.4 34.9 35.3 35.5 17.0 19.2 20.9 22.4 23.7 24.8 25.8 26.1 27.0 27.8 28.6 29.3 29.0 29.7 30.3 30.9 31.4 32.0 32.5 33.0 33.5 34.0 34.4 34.9 36.5 17.2 19.5 21.3 22.8 24.2 25.3 26.1 27.0 27.8 28.6 29.3 30.0 30.6 31.3 31.8 32.4 32.9 32.4 33.9 34.4 34.9 35.3 37.0 17.3 19.6 21.5 23.0 24.4 25.6 26.6 27.0 28.5 27.3 28.1 28.9 29.7 30.4 31.0 31.0 32.2 32.8 33.8 34.3 34.8 35.3 35.8 37.5 17.4 19.8 21.7 23.3 24.6 25.8 26.9 27.9 28.8 29.6 30.4 31.1 31.8 32.4 32.0 32.6 33.2 33.8 34.3 34.8 35.3 35.8 36.3 37.5 17.4 19.8 21.7 23.3 24.6 25.8 26.9 27.9 28.8 29.6 30.4 31.1 31.8 32.4 33.0 33.0 33.6 34.2 34.7 35.3 35.8 36.3 37.5 17.4 19.8 21.7 23.3 24.6 25.8 26.9 27.9 28.8 29.6 30.4 31.1 31.8 32.4 33.0 33.0 33.6 34.3 34.8 35.3 35.8 36.3 37.5 17.4 19.8 21.7 23.7 25.1 26.3 27.4 28.4 29.1 29.9 30.7 31.4 32.1 32.8 33.4 34.0 34.6 35.2 35.7 36.2 36.7 37.2 37.7 39.5 17.9 21.8 23.5 24.8 25.3 26.6 27.7 28.7 29.7 30.5 31.4 32.1 32.8 33.5 34.2 34.8 35.0 35.6 36.2 36.7 37.2 37.7 39.5 17.9 20.3 22.3 24.0 25.5 26.8 27.9 29.0 30.0 30.9 31.7 32.5 33.2 33.9 34.6 35.2 35.7 36.5 37.0 37.6 38.2 40.0 17.9 20.5 22.5 24.2 25.7 27.0 28.2 29.3 30.3 31.2 32.0 32.8 33.6 34.3 34.0 34.6 35.4 35.9 35.6 36.3 36.9 37.5 38.1 38.4 44.0 34.6 35.2 35.9 38.8 39.4 40.0 18.1 20.7 22.8 24.4 26.1 27.5 27.0 28.2 29.3 30.3 31.2 32.0 32.8 33.6 34.3 35.0 35.6 36.3 36.9 37.5 38.1 38.8 38.9 38.9 38.9 38.9 38.9 38.9 38.9		16.5	18.5	20.2	21.5	22.7	23.8	24.7	25.5	26.3	27.0	27.6	28.2	28.8	29.3	29.8	30.3	30.8	31.2	31.7	32.1	32.5
35.0 16.9 19.0 20.7 22.2 23.4 24.5 25.5 26.4 27.2 28.0 28.6 29.3 29.9 30.5 31.0 31.6 32.1 32.6 33.0 33.5 33.9 34.5 36.0 17.0 19.2 20.9 22.4 23.7 24.8 25.8 26.7 27.5 28.3 29.0 29.7 30.3 30.4 31.0 31.6 32.2 32.8 33.0 33.5 34.0 34.4 34.9 36.5 17.2 19.5 21.3 22.8 24.2 25.3 26.4 27.3 28.1 28.9 29.7 30.4 31.0 31.6 32.2 32.8 33.3 33.9 34.4 34.9 35.3 37.5 17.4 19.8 21.7 23.3 24.6 25.8 26.6 27.6 28.5 27.3 30.0 30.7 31.4 32.0 32.6 33.2 33.8 34.3 34.8 34.8 35.3 35.8 36.3 37.5 17.4 19.8 21.7 23.3 24.6 25.8 26.9 27.9 28.8 29.6 30.4 31.1 31.8 32.4 33.0 33.6 34.2 34.7 35.3 35.8 36.3 38.5 37.5 17.4 19.8 21.7 23.3 24.6 25.8 26.9 27.9 28.8 29.6 30.4 31.1 31.8 32.4 33.0 33.6 34.2 34.7 35.3 35.8 36.3 38.5 37.5 17.5 19.9 21.8 23.5 24.6 25.8 26.9 27.9 28.2 29.1 29.9 30.7 31.4 32.1 32.8 33.5 34.4 34.3 34.6 35.2 35.7 36.2 36.8 38.5 17.5 19.9 21.8 23.5 24.6 25.3 26.6 27.7 28.7 29.1 29.9 30.7 31.4 32.1 32.8 33.5 34.2 34.8 35.4 36.0 36.2 36.7 37.2 39.0 17.8 20.2 22.2 23.8 25.3 26.6 27.7 28.7 29.7 30.5 31.4 32.1 32.8 33.5 34.2 34.8 35.4 36.0 36.5 37.2 37.7 39.5 17.9 20.3 22.3 24.0 25.5 26.8 27.9 29.0 30.0 30.9 31.7 32.5 33.2 33.9 34.7 34.6 35.2 35.9 36.5 37.0 37.6 38.2 40.0 17.9 20.5 22.5 24.2 25.7 27.0 28.2 29.3 30.3 31.2 32.0 32.8 33.5 34.2 34.8 35.4 36.0 36.7 37.3 37.9 38.6 40.5 17.9 20.5 22.5 24.2 25.7 27.0 28.2 29.3 30.8 31.8 32.7 33.5 34.3 35.0 35.6 36.2 36.7 37.3 37.9 38.6 36.0 20.2 31.1 32.1 32.3 32.3 33.9 34.7 35.4 36.0 36.7 37.3 37.9 38.6 39.3 39.0 41.5 18.2 20.8 23.0 24.8 26.3 27.7 29.0 30.1 31.1 32.1 33.0 33.8 34.6 35.0 35.6 36.3 36.9 37.1 38.6 40.0 42.0 43.3 43.0 43.8 43.0 43.8 43.8 43.8 43.8 43.8 43.8 43.8 43.8		16.7	18.8	20.5	22.0	23,2	24.3	25.2	26.1	26.9	27.6	28.3	28.9	29.5	30.1	30.6	31.2	31.6	32.1	32.6	33.0	33.5
36.0 17.1 19.3 21.1 22.6 23.9 25.1 26.1 27.0 27.8 28.6 29.3 30.0 30.6 31.3 31.8 32.4 32.9 33.4 33.9 34.4 34.9 36.5 17.2 19.5 21.3 22.8 24.2 25.3 26.4 27.3 28.1 28.9 29.7 30.4 31.0 31.6 32.2 32.8 33.3 33.9 34.4 34.9 35.3 37.0 17.3 19.6 21.5 23.0 24.4 25.6 26.6 27.6 28.5 29.3 30.0 30.7 31.4 32.0 32.6 33.2 33.8 34.3 34.8 35.3 35.8 37.5 17.4 19.8 21.7 23.3 24.6 25.8 26.9 27.9 28.8 29.1 29.9 30.0 30.7 31.4 32.0 32.6 33.2 33.8 34.3 34.8 35.3 35.8 36.3 17.5 19.9 21.8 23.5 24.8 26.1 27.2 28.2 29.1 29.9 30.7 31.4 32.1 32.4 33.0 33.6 34.2 34.7 35.3 35.8 36.3 36.5 17.5 19.9 21.8 23.5 24.8 26.1 27.7 28.2 29.1 29.9 30.7 31.4 32.1 32.4 33.4 34.0 34.6 35.2 35.7 36.2 36.8 36.5 17.7 20.1 22.0 23.7 25.1 26.3 27.4 28.4 29.4 30.2 31.0 31.8 32.5 33.2 33.8 34.4 35.0 35.6 36.2 36.7 37.2 39.5 17.9 20.3 22.3 24.0 25.5 26.8 27.9 29.0 30.0 30.9 31.7 32.5 33.2 33.4 34.6 35.2 35.9 36.5 37.0 37.6 38.2 40.0 17.9 20.3 22.3 24.0 25.5 26.8 27.9 29.0 30.0 30.9 31.7 32.5 33.2 33.4 34.6 35.2 35.9 36.5 37.0 37.6 38.2 40.5 17.9 20.5 22.5 24.2 25.7 27.0 28.2 29.3 30.5 31.5 23.5 33.2 33.9 34.7 35.6 36.3 36.9 37.5 38.1 38.6 40.5 18.0 20.6 22.7 24.4 25.9 27.3 28.5 29.5 30.5 31.5 23.5 23.3 33.5 34.3 35.0 35.6 36.3 36.9 37.5 38.5 38.6 40.5 18.0 20.6 22.7 24.4 25.9 27.3 28.5 29.5 30.5 31.5 32.3 33.5 34.3 35.0 35.6 36.3 36.9 37.5 38.3 38.6 44.5 35.0 35.6 36.3 36.9 37.5 38.1 38.6 40.5 18.0 20.6 22.7 24.4 25.9 27.3 28.5 29.5 30.5 31.5 32.3 33.5 34.3 35.0 35.7 36.3 36.3 36.9 37.5 38.3 39.9 39.6 40.5 41.5 41.5 41.5 41.5 41.5 41.5 41.5 41		16.9	19.0	20.7	22.2	23.4	24.5	25.5	26.4	27.2	28.0	28.6	29.3	29.9	30.5	31.0	31.6	32.1	32.6	33.0	33.5	33.9
36.5 17.2 19.5 21.3 22.8 24.2 25.3 26.4 27.3 28.1 28.9 29.7 30.4 31.0 31.0 32.2 32.8 33.3 33.9 34.4 34.9 35.3 37.5 17.4 19.8 21.7 23.3 24.6 25.8 26.9 27.9 28.8 29.6 30.4 31.1 31.8 32.4 33.0 33.6 34.2 34.7 35.3 35.8 36.3 38.0 37.5 19.9 21.8 23.5 24.8 26.1 27.2 28.2 29.1 29.9 30.7 31.4 32.1 32.8 33.4 34.0 34.6 35.2 35.7 36.2 36.8 37.7 20.1 22.0 23.7 25.1 26.3 27.4 28.4 29.4 30.2 31.0 31.8 32.4 33.5 33.4 34.0 34.6 35.2 35.7 36.2 36.8 37.7 39.0 17.8 20.2 22.2 23.8 25.3 26.6 27.7 28.7 29.7 30.5 31.4 32.1 32.8 33.5 34.2 34.8 35.4 36.0 36.6 37.2 37.7 39.5 17.9 20.3 22.3 24.0 25.5 26.8 27.9 29.0 30.0 31.7 32.5 33.2 33.8 34.6 35.2 35.9 36.5 37.0 37.6 38.2 38.8 38.6 38.5 37.2 38.8 38.6 38.5 38		17.1	19.3	21.1	22.6	23.9	25.1	26.1	27.0	27.8	28.6	29.0	30.0	30.3	30.9	31.8	32.0	32.5	33.0	33.5	34.4	34.4
37.5		17.2	19.5	21.3	22.8	24.2	25.3	26.4	27.3	28.1	28.9	29.7	30.4	31.0	31.6	32.2	32.8	33.3	33.9	34.4	34.9	35.3
38.0 17.5 19.9 21.8 23.5 24.8 26.1 27.2 28.2 29.1 29.9 30.7 31.4 32.1 32.6 33.4 34.0 34.6 35.2 35.7 36.2 36.8 17.7 20.1 22.0 23.7 25.1 26.3 27.4 28.4 29.4 30.2 31.0 31.8 32.5 33.2 33.8 34.4 35.0 35.6 36.2 36.7 37.2 39.5 17.8 20.2 22.2 23.8 25.3 26.6 27.7 28.7 20.7 30.5 31.4 32.1 32.8 33.5 34.2 34.8 35.4 36.0 36.6 37.2 37.7 39.5 17.9 20.5 22.5 24.2 25.7 27.0 28.2 29.3 30.3 31.2 32.0 32.8 33.6 34.3 35.0 35.6 36.3 36.9 37.5 38.1 38.6 40.5 18.0 20.6 22.7 24.4 25.9 27.0 28.2 29.3 30.3 31.2 32.0 32.8 33.6 34.3 35.0 35.6 36.3 36.9 37.5 38.1 38.6 40.5 18.0 20.6 22.7 24.4 25.9 27.0 28.2 29.3 30.8 31.5 32.3 33.2 33.9 34.7 35.4 36.0 36.7 37.3 37.9 38.5 39.1 41.0 18.1 20.7 22.8 24.6 26.1 27.5 28.7 29.0 30.1 31.1 32.1 33.0 33.8 34.6 35.4 36.1 36.8 37.5 38.2 38.8 39.4 40.5 18.2 20.8 23.0 24.8 26.3 27.7 29.0 30.1 31.1 32.1 33.0 33.8 34.6 35.4 36.1 36.8 37.5 38.2 38.8 39.4 40.5 18.4 21.1 23.3 25.1 25.0 26.6 28.0 29.2 30.4 31.4 32.4 33.3 34.2 35.0 35.8 36.5 37.2 37.9 38.6 39.3 39.9 40.5 42.5 18.4 21.2 23.4 25.3 27.0 28.4 29.7 30.9 32.0 33.0 33.9 34.8 35.7 36.5 37.3 38.0 38.7 39.5 40.1 40.8 41.4 43.5 18.5 21.2 23.4 25.3 27.0 28.4 29.7 30.9 32.0 33.0 33.9 34.8 35.7 36.5 37.3 38.0 38.7 39.5 40.1 40.8 41.4 44.0 18.6 21.4 23.7 23.7 25.7 27.3 28.8 30.2 31.1 32.3 33.3 34.3 35.2 36.0 36.9 37.6 38.8 39.0 39.7 40.3 41.0 43.5 18.5 21.3 23.6 25.5 27.2 28.6 29.9 31.1 32.3 33.3 34.3 35.2 36.0 36.9 37.6 38.8 39.0 40.1 40.8 41.4 44.0 18.6 21.4 23.7 23.7 25.7 27.3 28.8 30.2 31.4 32.5 33.6 34.6 35.5 36.0 36.9 37.6 38.8 39.0 40.1 40.8 41.4 44.0 18.6 21.4 23.7 23.8 25.8 27.2 28.8 30.2 31.1 32.3 33.9 34.8 35.7 36.0 36.9 37.7 38.4 39.2 39.9 40.6 41.2 41.9 42.4 42.5 18.7 21.6 24.0 26.0 27.7 29.3 30.7 31.9 33.1 34.2 35.5 36.5 37.3 38.0 38.8 39.0 40.0 40.7 41.4 42.4 44.9 45.5 18.7 21.6 24.0 26.0 27.7 29.3 30.7 31.9 33.1 34.2 35.8 36.9 37.0 38.8 39.2 40.0 40.8 41.6 42.3 43.0 43.8 45.5 18.2 21.7 24.1 26.1 26.1 27.9 29.5 30.9 32.2 33.4 33.5 35.8 36.8 37.8 38.7 39.5 40.4 41.2 42.0 42.8 43.6 44.2 42.0 42.8 43.6 44.2 42.0 42.8 43.6 44.2 42.0 42.8 43.6 44.2 4		17.4	19.8	21.7	23.3	24.6	25.8	26.9	27.9	28.8	29.6	30.4	30.7	31.4	32.0	33.0	33.6	33.8	34.3	34.8	35.3	35.8
39.0		17.5	19.9	21.8	23.5	24.8	26.1	27.2	28.2	29.1	29.9	30.7	31.4	32.1	32.8	33.4	34.0	34.6	35.2	35.7	36.2	36.8
40.0 17.9 20.3 22.3 24.0 25.5 26.8 27.9 29.0 30.0 30.9 31.7 32.5 33.2 33.9 34.6 35.2 35.9 36.5 37.0 37.6 38.2 17.9 20.5 22.5 24.2 25.7 27.0 28.2 29.3 30.3 31.2 32.0 32.8 33.6 34.3 35.0 35.6 36.3 36.9 37.5 38.1 38.6 40.5 18.0 20.6 22.7 24.4 25.9 27.3 28.5 29.5 30.5 31.5 32.3 33.2 33.9 34.7 35.4 36.0 36.7 37.3 37.9 38.5 39.1 41.0 18.1 20.7 22.8 24.6 26.1 27.5 28.7 29.8 30.8 31.8 32.7 33.5 34.3 35.0 35.7 36.4 37.1 37.7 38.4 39.0 39.6 18.2 20.8 23.0 24.8 26.3 27.7 29.0 30.1 31.1 32.1 33.0 33.8 34.6 35.4 36.1 36.8 37.5 38.2 36.8 39.4 40.0 18.2 20.8 23.0 24.8 26.2 29.2 30.4 31.4 32.4 33.3 34.2 35.0 35.8 36.5 37.2 37.9 38.6 39.3 39.9 40.5 18.4 21.1 23.3 25.1 26.8 28.2 29.5 30.6 31.7 32.7 33.6 34.5 35.3 36.1 36.9 37.5 38.2 36.8 39.4 40.0 18.4 21.2 23.4 25.3 27.0 28.4 29.7 30.9 32.0 33.0 33.9 34.8 35.7 36.5 37.3 38.0 38.7 39.5 40.1 40.8 41.4 43.5 18.5 21.3 23.6 25.5 27.2 28.6 29.9 31.1 32.3 33.3 34.3 35.2 36.0 36.9 37.7 38.4 39.2 39.9 40.6 41.2 41.9 18.6 21.4 23.7 25.7 27.3 28.8 30.2 31.4 32.5 33.6 34.6 35.5 36.4 37.2 38.0 38.8 39.6 40.3 41.0 41.7 42.4 44.5 18.5 21.3 23.6 25.5 27.2 28.6 29.9 31.1 32.3 33.9 34.9 35.8 36.7 37.0 38.4 39.2 40.0 40.7 41.4 42.1 42.8 44.5 18.7 21.5 23.8 25.8 27.5 29.1 30.4 31.7 32.8 33.9 34.9 35.8 36.7 37.0 38.4 39.2 40.0 40.7 41.4 42.1 42.8 45.0 18.7 21.5 23.8 25.8 27.5 29.1 30.4 31.7 32.8 33.9 34.9 35.8 36.7 37.0 38.4 39.2 40.0 40.7 41.4 42.1 42.8 45.0 18.7 21.5 23.8 25.8 27.5 29.1 30.4 31.7 32.8 33.9 34.9 35.8 36.7 37.0 38.8 39.6 40.4 41.1 41.9 42.6 43.3 44.5 41.0 41.7 42.4 42.8 43.2 43.9 44.0 44.0 44.0 44.0 44.0 44.0 44.0 44		17.8	20.2	22.2	23.8	25.3	26.6	27.7	28.4	29.4	30.2	31.4	31.8	32.5	33.2	33.8	34.4	35.0	35.6	36.2	36.7	37.2
40.5		17.9	20.3	22.3	24.0	25.5	26.8	27.9	29.0	30.0	30.9	31.7	32.5	33.2	33.9	34.6	35.2	35.9	36.5	37.0	37.6	38.2
41.0 18.1 20.7 22.8 24.6 26.1 27.5 28.7 29.8 30.8 31.8 32.7 33.5 34.3 35.0 35.7 36.4 37.1 37.7 38.4 39.0 39.6 18.2 20.8 23.0 24.8 26.3 27.7 29.0 30.1 31.1 32.1 33.0 33.8 34.6 35.4 36.1 36.8 37.5 38.2 38.8 39.9 40.5 18.3 21.0 23.1 25.0 26.6 28.0 29.2 30.4 31.4 32.4 33.3 34.2 35.0 35.8 36.5 37.2 37.9 38.6 39.3 39.9 40.5 18.4 21.1 23.3 25.1 26.8 28.2 29.5 30.6 31.7 32.7 33.6 34.5 35.3 36.1 36.9 37.6 38.3 39.0 39.7 40.3 41.0 18.4 21.2 23.4 25.3 27.0 28.4 29.7 30.9 32.0 33.0 33.9 34.8 35.7 36.5 37.3 38.0 38.7 39.5 40.1 40.8 41.4 43.5 18.5 21.3 23.6 25.5 27.2 28.6 29.9 31.1 32.3 33.3 34.3 35.2 36.0 36.9 37.7 38.4 39.2 39.9 40.6 41.2 41.9 42.6 18.6 21.4 23.7 25.7 27.3 28.8 30.2 31.4 32.5 33.6 34.6 35.5 36.3 36.0 38.8 39.6 40.3 41.0 41.7 42.4 44.5 18.7 21.5 23.8 25.8 27.5 29.1 30.4 31.7 32.8 33.9 34.9 35.8 36.7 37.6 38.4 39.2 40.0 40.7 41.4 42.1 42.8 18.7 21.5 23.8 25.8 27.5 29.1 30.4 31.9 33.1 34.2 35.2 36.0 36.9 37.0 38.8 39.6 40.4 41.1 41.9 42.6 43.3 18.7 21.6 24.0 26.0 27.7 29.3 30.7 31.9 33.1 34.2 35.5 36.5 37.3 38.0 38.8 39.6 40.4 41.1 41.9 42.6 43.3 18.8 21.8 24.2 26.3 28.1 29.7 31.1 32.4 33.6 34.7 35.8 36.8 37.8 38.7 39.5 40.4 41.2 42.0 42.7 43.5 44.2 46.5 18.8 21.9 24.4 26.5 28.3 29.9 31.3 32.7 33.9 35.0 36.1 37.1 38.1 39.0 39.9 40.8 41.6 42.4 43.2 43.9 44.7 18.9 22.0 24.5 26.6 28.4 30.1 31.6 32.9 34.2 35.3 36.4 37.8 38.8 39.4 40.0 40.8 41.6 42.4 43.2 43.9 44.7 18.9 22.0 24.5 26.6 28.4 30.1 31.6 32.9 34.2 35.3 36.4 37.8 38.8 39.4 40.8 41.5 42.4 43.2 43.9 44.7 19.0 22.1 24.6 26.8 28.6 30.3 31.8 33.2 34.4 35.6 36.7 37.8 38.8 39.4 40.1 41.0 41.9 42.8 43.6 44.4 45.2 19.0 22.1 24.7 26.9 28.8 30.5 32.0 33.4 34.7 35.9 37.0 38.1 39.1 40.1 41.0 41.9 42.8 43.7 44.5 45.3 46.1 19.0 22.1 24.6 26.8 28.6 30.3 31.8 33.2 34.4 35.6 36.7 37.8 38.8 39.4 40.4 41.8 42.7 43.2 44.0 44.8 45.6 48.5 19.1 22.2 24.8 27.0 29.0 30.7 32.2 33.6 34.9 35.2 36.8 37.8 38.8 39.4 40.4 41.6 42.3 43.2 44.1 44.9 45.6 48.5 19.1 22.2 24.8 27.0 29.0 30.7 32.2 33.6 34.9 35.2 36.8 37.8 38.8 39.4 40.4 41.4 42.3 43.2 44.1 44.9 45.5 44.9 19.1 22.2 24.8 27.0 2		18.0	20.5	22.7	24.4	25.9	27.3	28.2	29.3	30.3	31.2	32.0	32.8	33.6	34.3	35.0	35.6	36.3	36.9	37.5	38.1	38.6
42.0 18.3 21.0 23.1 25.0 26.6 28.0 29.2 30.4 31.4 32.4 33.3 34.2 35.0 35.8 36.5 37.2 37.9 38.6 39.3 39.9 40.5 18.4 21.1 23.3 25.1 26.8 28.2 29.5 30.6 31.7 32.7 33.6 34.5 35.3 36.1 36.9 37.6 38.3 39.0 39.7 40.3 41.0 18.4 21.2 23.4 25.3 27.0 28.4 29.7 30.9 32.0 33.0 33.9 34.8 35.7 36.5 37.3 38.0 38.7 39.5 40.1 40.8 41.4 43.5 18.5 21.3 23.6 25.5 27.2 28.6 29.9 31.1 32.3 33.3 34.3 35.2 36.0 36.9 37.7 38.4 39.2 39.9 40.6 41.2 41.9 44.0 18.6 21.4 23.7 25.7 27.3 28.8 30.2 31.4 32.5 33.6 34.6 35.5 36.4 37.2 38.0 38.8 39.6 40.3 41.0 41.7 42.4 44.5 18.7 21.5 23.8 25.8 27.5 29.1 30.4 31.7 32.8 33.9 34.9 35.2 36.0 36.9 37.7 38.8 39.6 40.0 40.7 41.4 42.1 42.8 18.7 21.6 24.0 26.0 27.7 29.3 30.7 31.9 33.1 34.2 35.2 36.2 37.1 37.9 38.8 39.6 40.4 41.1 41.9 42.6 43.3 45.5 18.8 21.7 24.1 26.1 27.9 29.5 30.9 32.2 33.4 34.5 35.5 36.5 37.4 38.3 39.2 40.0 40.8 41.6 42.3 43.0 43.8 46.0 18.8 21.8 24.2 26.3 28.1 29.7 31.1 32.4 33.6 34.7 35.8 36.8 37.8 38.7 39.5 40.4 41.2 42.0 42.7 43.5 44.2 46.5 18.9 21.9 24.4 26.5 28.3 29.9 31.3 32.7 33.9 35.0 36.1 37.1 38.1 39.0 39.9 40.8 41.6 42.4 43.2 43.9 44.7 18.9 22.0 24.5 26.6 28.4 30.1 31.6 32.9 34.2 35.3 36.4 37.4 38.3 39.4 40.3 41.2 42.0 42.8 43.6 44.4 45.2 47.5 18.9 22.0 24.5 26.6 28.6 30.3 31.8 33.2 34.4 35.6 36.7 37.8 38.8 39.7 40.6 41.5 42.4 43.2 44.0 44.8 45.6 48.0 19.6 22.1 24.6 26.8 28.6 30.3 31.8 33.2 34.4 35.6 36.7 37.8 38.8 39.7 40.6 41.5 42.8 43.6 44.0 44.8 45.6 48.0 19.6 22.1 24.6 26.8 28.6 30.3 31.8 33.2 34.4 35.6 36.7 37.8 38.8 39.7 40.6 41.5 42.8 43.6 44.0 44.8 45.6 48.0 19.6 22.1 24.7 26.9 28.8 30.5 32.0 33.4 34.7 35.9 37.0 38.1 39.1 40.1 41.0 41.9 42.8 43.7 44.5 45.3 46.1 19.0 22.1 24.6 26.8 28.6 30.3 31.8 33.2 34.4 35.6 37.3 38.8 39.7 40.6 41.5 42.4 43.2 44.0 44.8 45.6 48.0 19.1 22.2 24.8 27.0 29.0 30.7 32.2 33.6 34.9 35.2 36.4 37.6 38.7 39.8 40.8 41.8 42.7 43.6 44.5 45.3 46.1 19.1 22.2 24.8 27.0 29.0 30.7 32.2 33.6 34.9 35.2 36.4 37.6 38.7 39.8 40.8 41.8 42.7 43.6 44.5 45.3 46.1 19.1 22.2 24.8 27.0 29.0 30.7 32.4 33.9 35.2 36.4 37.6 38.7 39.8 40.8 41.8 42.7 43.6 44.5 45.3 4		18.1	20.7	22.8	24.6	26.1	27.5	28.7	29.8	30.8	31.8	32.7	33.5	34.3	35.0	35.7	36.4	37.1	37.7	38.4	39.0	39.6
42.5		18.2	21.0	23.0	25.0	26.5	28.0	29.0	30.1	31.4	32.1	33.0	33.8	34.6	35.4	36 • 1 36 • 5	36.8	37.5	38.2	38.8	39.4	40.0
43.5 18.5 21.3 23.6 25.5 27.2 28.6 29.9 31.1 32.3 33.3 34.3 35.2 36.0 36.9 37.7 38.4 39.2 39.9 40.6 41.2 41.9 44.5 18.6 21.4 23.7 25.7 27.3 28.8 30.2 31.4 32.5 33.6 34.6 35.5 36.4 37.2 38.0 38.8 39.6 40.3 41.0 41.7 42.4 44.5 18.7 21.5 23.8 25.8 27.5 29.1 30.4 31.7 32.8 33.9 34.9 35.8 36.7 37.6 38.4 39.2 40.0 40.7 41.4 42.1 42.8 45.0 18.7 21.6 24.0 26.0 27.7 29.3 30.7 31.9 33.1 34.2 35.2 36.2 37.1 37.9 38.8 39.6 40.4 41.1 41.9 42.6 43.3 45.5 18.8 21.7 24.1 26.1 27.9 29.5 30.9 32.2 33.4 34.5 35.5 36.5 37.4 38.3 39.2 40.0 40.8 41.6 42.3 43.0 43.8 46.5 18.8 21.8 24.2 26.3 28.1 29.7 31.1 32.4 33.6 34.7 35.8 36.8 37.8 38.8 39.6 40.4 41.2 42.0 42.7 43.5 44.2 46.5 18.9 21.9 24.4 26.5 28.3 29.9 31.3 32.7 33.9 35.0 36.1 37.1 38.1 39.0 39.9 40.8 41.6 42.4 43.2 43.9 44.7 47.0 18.9 22.0 24.5 26.6 28.4 30.1 31.6 32.9 34.2 35.3 36.4 37.4 38.4 39.4 40.3 41.2 42.0 42.8 43.6 44.4 45.2 47.5 19.0 22.1 24.6 26.8 28.6 30.3 31.8 33.2 34.4 35.6 36.7 37.8 38.8 39.7 40.6 41.5 42.4 43.2 44.0 44.8 45.6 48.0 19.0 22.1 24.7 26.9 28.8 30.5 32.0 33.4 34.7 35.9 37.0 38.1 39.1 40.1 41.0 41.9 42.8 43.2 44.0 44.8 45.6 19.0 22.1 24.7 26.9 28.8 30.5 32.0 33.4 34.7 35.9 37.0 38.1 39.1 40.1 41.0 41.9 42.8 43.2 44.1 44.9 45.7 46.5 19.0 22.1 24.7 26.9 28.8 30.5 32.0 33.4 34.7 35.9 37.0 38.1 39.4 40.4 41.4 42.3 43.2 44.1 44.9 45.7 46.5 19.1 22.2 24.8 27.0 29.0 30.7 32.2 33.6 34.9 36.2 37.3 38.4 39.4 40.4 41.4 42.3 43.2 44.1 44.9 45.7 46.5 19.1 22.2 24.8 27.0 29.0 30.7 32.2 33.6 34.9 35.2 36.4 37.6 38.7 39.8 40.8 41.8 42.7 43.6 44.5 45.3 46.1 49.1 22.3 24.9 27.2 29.1 30.9 32.4 33.9 35.2 36.4 37.6 38.7 39.8 40.8 41.8 42.7 43.6 44.5 45.3 46.1 49.1 22.3 24.9 27.2 29.1 30.9 32.4 33.9 35.2 36.4 37.6 38.7 39.8 40.8 41.8 42.7 43.6 44.5 45.5 46.6 47.5 49.5 49.5 49.5 49.5 49.5 49.5 49.5 49	42.5	18.4	21.1	23.3	25.1	26.8	28.2	29.5	30.6	31.7	32.7	33.6	34.5	35.3	36.1	36.9	37.6	38.3	39.0	39.7	40.3	41.0
44.0 18.6 21.4 23.7 25.7 27.3 28.8 30.2 31.4 32.5 33.6 34.6 35.5 36.4 37.2 38.0 38.8 39.6 40.3 41.0 41.7 42.4 44.5 18.7 21.5 23.8 25.8 27.5 29.1 30.4 31.7 32.8 33.9 34.9 35.8 36.7 37.6 38.4 39.2 40.0 40.7 41.4 42.1 42.8 45.6 18.7 21.6 24.0 26.0 27.7 29.3 30.7 31.9 33.1 34.2 35.2 36.2 37.1 37.9 38.8 39.6 40.4 41.1 41.0 42.6 43.3 45.5 18.8 21.7 24.1 26.1 27.9 29.5 30.9 32.2 33.4 34.5 35.5 36.5 37.4 38.3 39.2 40.0 40.8 41.6 42.3 43.0 43.8 46.0 18.8 21.8 24.2 26.3 28.1 29.7 31.1 32.4 33.6 34.7 35.8 36.8 37.8 38.7 39.5 40.4 41.2 42.0 42.7 43.5 44.2 46.5 18.9 21.9 24.4 26.5 28.3 29.9 31.3 32.7 33.9 35.0 36.1 37.1 38.1 39.0 39.9 40.8 41.6 42.4 43.2 43.9 44.7 18.9 22.0 24.5 26.6 28.4 30.1 31.6 32.9 34.2 35.3 36.4 37.4 38.4 39.4 40.3 41.2 42.0 42.8 43.6 44.4 45.2 47.5 19.0 22.1 24.6 26.8 28.6 30.3 31.8 33.2 34.4 35.6 36.7 37.8 38.8 39.7 40.6 41.5 42.4 43.2 44.0 44.8 45.6 48.5 19.0 22.1 24.7 26.9 28.8 30.5 32.0 33.4 34.7 35.9 37.0 38.1 39.1 40.1 41.0 41.9 42.8 43.7 44.5 45.3 46.1 19.1 22.2 24.8 27.0 29.0 30.7 32.2 33.6 34.9 35.2 36.2 37.3 38.4 39.4 40.4 41.4 42.3 43.2 44.1 44.9 45.7 46.5 19.1 22.2 24.8 27.0 29.1 30.9 32.4 33.9 35.2 36.4 37.6 38.7 39.8 40.8 41.8 42.7 43.6 44.5 45.3 46.2 47.0 49.5 19.1 22.3 24.9 27.2 29.1 30.9 32.4 33.9 35.2 36.4 37.6 38.7 39.8 40.8 41.8 42.7 43.6 44.5 45.8 46.5 47.5 19.1 22.4 25.0 27.3 29.3 31.1 32.6 34.1 35.5 36.7 37.9 39.0 40.1 41.1 42.1 42.1 42.1 44.0 44.9 45.8 46.5 47.5		18.4	21.2	23.4	25.3	27.0	28.4	29.7	30.9	32.0	33.0	33.9	34.8	35.7	36.5	37.3	38.0	38.7	39.5	40.1	40.8	41.4
45.0 18.7 21.6 24.0 26.0 27.7 29.3 30.7 31.9 33.1 34.2 35.2 36.2 37.1 37.9 38.8 39.6 40.4 41.1 41.9 42.6 42.3 43.3 45.5 18.8 21.7 24.1 26.1 27.9 29.5 30.9 32.2 33.4 34.5 35.5 36.5 37.4 38.3 39.2 40.0 40.8 41.6 42.3 43.0 43.8 18.8 21.8 24.2 26.3 28.1 29.7 31.1 32.4 33.6 34.7 35.8 36.8 37.8 38.7 39.5 40.4 41.2 42.0 42.7 43.5 44.2 46.5 28.3 29.9 31.3 32.7 33.9 35.0 36.1 37.1 38.1 39.0 39.9 40.8 41.6 42.4 43.2 43.9 44.7 47.0 18.9 22.0 24.5 28.3 29.9 31.3 32.7 33.9 35.0 36.1 37.1 38.1 39.0 39.9 40.8 41.6 42.4 43.2 43.9 44.7 47.0 18.9 22.0 24.5 26.5 28.4 30.1 31.6 32.9 34.2 35.3 36.4 37.4 38.4 39.4 40.3 41.2 42.0 42.8 43.6 44.4 45.2 47.5 19.0 22.1 24.6 26.8 28.6 30.3 31.8 33.2 34.4 35.6 36.7 37.8 38.8 39.7 40.6 41.5 42.4 43.2 44.0 44.8 45.6 48.0 19.0 22.1 24.6 26.8 28.6 30.3 31.8 33.2 34.4 35.6 36.7 37.8 38.8 39.7 40.6 41.5 42.4 43.2 44.0 44.8 45.6 48.5 19.0 22.1 22.2 24.8 27.0 29.0 30.7 32.2 33.6 34.9 35.2 36.2 37.3 38.4 39.4 40.4 41.4 42.3 43.2 44.1 44.9 45.7 46.5 19.1 22.2 24.8 27.0 29.0 30.7 32.2 33.6 34.9 35.2 36.4 37.6 38.7 39.8 40.8 41.8 42.7 43.6 44.5 45.3 46.2 47.0 49.5 19.1 22.4 25.0 27.3 29.3 31.1 32.6 34.1 35.5 36.7 37.9 39.0 40.1 41.1 42.1 42.1 42.1 44.0 44.9 45.8 46.5 47.5	44.0	18.6	21.4	23.7	25.7	27.3	28.8	30.2	31.4	32.5	33.6	34.6	35.5	36.4	37.2	38.0	38.8	39.6	40.3	41.0	41.7	42.4
45.5 18.8 21.7 24.1 26.1 27.9 29.5 30.9 32.2 33.4 34.5 35.5 36.5 37.4 38.3 39.2 40.0 40.8 41.6 42.3 43.0 43.8 46.0 18.8 21.8 24.2 26.3 28.1 29.7 31.1 32.4 33.6 34.7 35.8 36.8 37.8 38.7 39.5 40.4 41.2 42.0 42.7 43.5 44.2 46.5 18.9 21.9 24.4 26.5 28.3 29.9 31.3 32.7 33.9 35.0 36.1 37.1 38.1 39.0 39.9 40.8 41.6 42.4 43.2 43.9 44.7 18.9 22.0 24.5 26.6 28.4 30.1 31.6 32.9 34.2 35.3 36.4 37.4 38.4 39.4 40.3 41.2 42.0 42.8 43.6 44.4 45.2 47.5 19.0 22.1 24.6 26.8 28.6 30.3 31.8 33.2 34.4 35.6 36.7 37.8 38.8 39.7 40.6 41.5 42.4 43.2 44.0 44.8 45.6 48.0 19.0 22.1 24.6 26.8 28.8 30.5 32.0 33.4 34.7 35.9 37.0 38.1 39.1 40.1 41.0 41.9 42.8 43.7 44.5 45.3 46.1 19.1 22.2 24.8 27.0 29.0 30.7 32.2 33.6 34.9 35.2 36.2 37.3 38.4 39.4 40.4 41.4 42.3 43.2 44.1 44.9 45.7 46.5 49.0 19.1 22.3 24.9 27.2 29.1 30.9 32.4 33.9 35.2 36.4 37.6 38.7 39.8 40.8 41.8 42.7 43.6 44.5 45.3 46.2 47.0 49.5 19.1 22.4 25.0 27.3 29.3 31.1 32.6 34.1 35.5 36.7 37.9 39.0 40.1 41.1 42.1 42.1 42.1 44.0 44.9 45.8 46.5 47.5		18.7 18.7	21.5	23.8	25.8	27.5	29.1	30.4	31.7	32.8	33.9	34.9	35.8	36.7	37.6	38.4	39.2	40.0	40.7	41.4	42.1	42.8
46.0 18.8 21.8 24.2 26.3 28.1 29.7 31.1 32.4 33.6 34.7 35.8 36.8 37.8 38.7 39.5 40.4 41.2 42.0 42.7 43.5 44.2 46.5 18.9 21.9 24.4 26.5 28.3 29.9 31.3 32.7 33.9 35.0 36.1 37.1 38.1 39.0 39.9 40.8 41.6 42.4 43.2 43.9 44.7 18.9 22.0 24.5 26.6 28.4 30.1 31.6 32.9 34.2 35.3 36.4 37.4 38.4 39.4 40.3 41.2 42.0 42.8 43.6 44.4 45.2 47.5 19.0 22.1 24.6 26.8 28.6 30.3 31.8 33.2 34.4 35.6 36.7 37.8 38.8 39.7 40.6 41.5 42.4 43.2 44.0 44.8 45.6 48.0 19.0 22.1 24.6 26.8 28.6 30.3 32.0 33.4 34.7 35.9 37.0 38.1 39.1 40.1 41.0 41.9 42.8 43.7 44.5 45.3 46.1 19.1 22.2 24.8 27.0 29.0 30.7 32.2 33.6 34.9 35.2 37.3 38.4 39.4 40.4 41.4 42.3 43.2 44.1 44.9 45.7 46.5 49.0 19.1 22.3 24.9 27.2 29.1 30.9 32.4 33.9 35.2 36.4 37.6 38.7 39.8 40.8 41.8 42.7 43.6 44.5 45.3 46.2 47.0 49.5 19.1 22.4 25.0 27.3 29.3 31.1 32.6 34.1 35.5 36.7 37.9 39.0 40.1 41.1 42.1 42.1 43.1 44.0 44.9 45.8 46.5 47.5	45.5	18.8	21.7	24.1	26.1	27.9	29.5	30.9	32.2	33.4	34.5	35.5	36.5	37.4	38.3	39.2	40.0	40.8	41.6	42.3	43.0	43.8
47.0 18.9 22.0 24.5 26.6 28.4 30.1 31.6 32.9 34.2 35.3 36.4 37.4 38.4 39.4 40.3 41.2 42.0 42.8 43.6 44.4 45.2 48.0 19.0 22.1 24.6 26.8 28.6 30.3 31.8 33.2 34.4 35.6 36.7 37.8 38.8 39.7 40.6 41.5 42.4 43.2 44.0 44.8 45.6 19.0 22.1 24.7 26.9 28.8 30.5 32.0 33.4 34.7 35.9 37.0 38.1 39.1 40.1 41.0 41.9 42.8 43.7 44.5 45.3 46.1 19.1 22.2 24.8 27.0 29.0 30.7 32.2 33.6 34.9 36.2 37.3 38.4 39.4 40.4 41.4 42.3 43.2 44.1 44.9 45.7 46.5 49.0 19.1 22.3 24.9 27.2 29.1 30.9 32.4 33.9 35.2 36.4 37.6 38.7 39.8 40.8 41.8 42.7 43.6 44.5 45.3 46.2 47.0 49.5 19.1 22.4 25.0 27.3 29.3 31.1 32.6 34.1 35.5 36.7 37.9 39.0 40.1 41.1 42.1 42.1 43.1 44.0 44.9 45.8 46.6 47.5		18.8	21.8	24.2	26.3	28.1	29.7	31.1	32.4	33.6	34.7	35.8	36.8	37.8	38.7	39.5	40.4	41.2	42.0	42.7	43.5	44.2
47.5 19.0 22.1 24.6 26.8 28.6 30.3 31.8 33.2 34.4 35.6 36.7 37.8 38.8 39.7 40.6 41.5 42.4 43.2 44.0 44.8 45.6 48.0 19.0 22.1 24.7 26.9 28.8 30.5 32.0 33.4 34.7 35.9 37.0 38.1 39.1 40.1 41.0 41.9 42.8 43.7 44.5 45.3 46.1 19.1 22.2 24.8 27.0 29.0 30.7 32.2 33.6 34.9 36.2 37.3 38.4 39.4 40.4 41.4 42.3 43.2 44.1 44.9 45.7 46.5 49.0 19.1 22.3 24.9 27.2 29.1 30.9 32.4 33.9 35.2 36.4 37.6 38.7 39.8 40.8 41.8 42.7 43.6 44.5 45.3 46.2 47.0 49.5 19.1 22.4 25.0 27.3 29.3 31.1 32.6 34.1 35.5 36.7 37.9 39.0 40.1 41.1 42.1 42.1 44.0 44.9 45.8 46.6 47.5	47.0	18.9	22.0	24.5	26.6	28.4	30.1	31.6	32.9	34.2	35.3	36.4	37.4	38.4	39.4	40.3	41.2	42.0	42.8	43.6	44.4	45.2
48.5 19.1 22.2 24.8 27.0 29.0 30.7 32.2 33.6 34.9 36.2 37.3 38.4 39.4 40.4 41.4 42.3 43.2 44.1 44.9 45.7 46.5 49.0 19.1 22.3 24.9 27.2 29.1 30.9 32.4 33.9 35.2 36.4 37.6 38.7 39.8 40.8 41.8 42.7 43.6 44.5 45.3 46.2 47.0 49.5 19.1 22.4 25.0 27.3 29.3 31.1 32.6 34.1 35.5 36.7 37.9 39.0 40.1 41.1 42.1 42.1 44.0 44.9 45.8 46.6 47.5		19.0	22.1	24.6	26.8	28.6	30.3	31.8	33.2	34.4	35.6	36.7	37.8	38.8	39.7	40.6	41.5	42.4	43.2	44.0	44.8	45.6
49.0 19.1 22.3 24.9 27.2 29.1 30.9 32.4 33.9 35.2 36.4 37.6 38.7 39.8 40.8 41.8 42.7 43.6 44.5 45.3 46.2 47.0 49.5 19.1 22.4 25.0 27.3 29.3 31.1 32.6 34.1 35.5 36.7 37.9 39.0 40.1 41.1 42.1 43.1 44.0 44.9 45.8 46.6 47.5	48.5	19.1	22.2	24.8	27.0	29.0	30.7	32.2	33.6	34.9	36.2	37.3	38.4	39.4	40.4	41.4	42.3	43.2	44.1	44.9	45.7	46.5
50.0 19.2 22.4 25.1 27.4 29.5 31.2 32.9 34.3 35.7 37.0 38.2 39.3 40.4 41.5 42.5 43.5 44.4 45.3 46.2 47.1 47.9		19.1	22.3	24.9	27.2	29.1	30.9	32.4	33.9	35.2	36.4	37.6	38.7	39.8	40.8	41.8	42.7	43.6	44.5	45.3	46.2	47.0
		19.2	22.4	25.1	27.4	29.5	31.2	32.9	34.3	35.7	37.0	38.2	39.3	40.4	41.5	42.5	43.5	44.0	45.3	45.8	47.1	47.9

1.	STUMP DOB	0.0 0	.2	0.4	0.6	 0.8	1.0	1,2	- STU 1•4,	MP HE 1.6	IGHT 1.8	(IN F 2.0	EET) 2.2	2.4	2.6	2.8	3.0	3.2	3.4			4.0
\$ 1.0		3.1 3	.2	3.4	3.5	3.6	3.8	3.9	4.0	4.1	4.2	4.4	4.5	4.6	4.7	4.8	4.9	5.0	5.0	5.1	5.2	5.3
2.0				4.0	4.1	4.3	4.4	4.6	4.7	4.9	5.0	5.1	5.3	5.4	5.5	5.6	5.7	5.8	6.0	6.1	6.2	6.3
\$ 6.7	-	4.2 4	.4	4.6	4.7	4.9	5.1	5.3	5.5	5.6	5.8	5.9	6.1	6.2	6.4	6.5	6.6	6.7	6.9	7.0	7.1	7.2
\$ 1.00				5.1	5.4	5.6	5.8	6.0	6.2	6.4	6.5	6.7	6.9	7.0	7.2	7.3	7.5	7.6	7.8	7.9	8.1	8.2
10.0						6.2	6.4	6.7	6.9	7.1	7.3	7.5	7.7	7.8	8.0	8.2	8.4	8.5	8.7	8.8	9.0	9.1
111			.0	6.3		6.8	7.1	7.3	7.6	7.8	8.0	8.2	8.5	8.7	8.9	9.0	9.2	9.4	9.6	9.8	9.9 1	0.1
225						7.5	7.7	8.0	8.3	8.5	8.8	9.0	9.2	9.5	9.7	9.9	10.1	10.3	10.5	10.7 1	0.9 1	1.1
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46.5 21.2 22.6 24.1 25.5 26.8 28.1 29.4 30.7 31.9 33.0 34.2 35.3 36.4 37.4 38.9 39.9 40.9 41.9 42.9 43.8 44.7 21.4 22.8 24.3 25.7 27.1 28.4 29.7 30.9 32.2 33.4 34.5 35.6 36.7 37.8 38.9 39.9 40.9 41.9 42.9 43.8 44.7 47.5 21.6 23.0 24.5 25.9 27.3 28.6 30.0 31.2 32.5 33.7 34.8 36.0 37.1 38.2 39.3 40.3 41.3 42.3 43.3 44.3 45.2 21.6 23.0 24.5 25.9 27.5 28.9 30.2 31.5 32.8 34.0 35.2 36.3 37.5 38.6 39.7 40.7 41.7 42.8 43.7 44.7 45.7 48.5 21.9 23.4 24.9 26.3 27.8 29.2 30.5 31.8 33.1 34.3 35.5 36.7 37.8 38.9 40.0 41.1 42.2 43.2 44.2 45.2 46.1 49.0 22.0 23.6 25.1 26.6 28.0 29.4 30.8 32.1 33.4 34.6 35.8 37.0 38.2 39.3 40.4 41.5 42.6 43.6 44.6 45.6 46.6 45.6 4	45.5	20.9	22.3	23.7	25.0	26.3	27.6	28.9	30.1	31.3	32.4	33.5	34.0	36.0	37.1	38.1	39.1	40.1	41.0	42.0	42.9	43.8
47.5 21.6 23.0 24.5 25.9 27.3 28.6 30.0 31.2 32.5 33.7 34.8 36.0 37.1 36.2 37.3 40.3 40.3 41.3 42.3 43.7 44.7 45.7 45.7 45.7 23.2 24.7 26.1 27.5 28.9 30.2 31.5 32.8 34.0 35.2 36.3 37.5 38.6 39.7 40.7 41.7 42.8 43.7 44.7 45.7 45.7 21.9 23.4 24.9 26.3 27.8 29.2 30.5 31.8 33.1 34.3 35.5 36.7 37.8 38.9 40.0 41.1 42.2 43.2 44.2 45.2 46.1 49.0 22.0 23.6 25.1 26.6 28.0 29.4 30.8 32.1 33.4 34.6 35.8 37.0 38.2 39.3 40.4 41.5 42.6 43.6 44.6 45.6 46.6 46.6 46.6 46.6 46.6 46	46.5	21.2	22.6	24.1	25.5	26.8	28.1	29.4	30.7	31.9	33.0	34.5	35.6	36.7	37.8	38.9	39.9	40.9	41.9	42.9	43.8	44.7
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	48.5	21.9	23.4	24.9	26.3	27.8	29.2	30.5	31.8	33.1	34.5	35.8	37.0	38.2	39.3	40.4	41.	42.6	43.6	44.6	45.6	46.6
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13.5	7.5 7.8	8.1	8.4 8	3.8 9.1 9.1 9.4	9.4	9.7 1	0.0 1	0.3 1	10.5	10.8	11.1	11.3	11.6] 12.0]	11.8	12.0 12.5	12.3	12.5 13.0	12.7	13.4
14.0 14.5	7.7 8.0 7.9 8.3		0 0	2 9 7	100	10.2 1	0.6.1	1.0 1	1 - 3 '	11.5	11-8	12.1	12.4	12.7	12.9	13.2	13.4	13.7	13.7
15.0	8.1 8.5	0 1		0.6 10.0 0.9 10.3	10.6	11.0 1	1.7 1	1.6 1	12.0	12.3	12.6	12.9	13.2	13.3	13.8	14.1	14.0	14.0	14.7
15.5 16.0	8.4 8.7 8.6 9.0	9.4	9 9 10	1 2 10 A	10.9	11.2 1	11.6 1	2.0 1	12.3	12.7	13.0	13.3	13.6	13.9	14.2	14.5	14.5	12.1	10.5
16.5	8.8 9.2 9.0 9.4	9.6 1	0 2 10	0.4 10.8	11.5	11.9 1	12.3 1	2.7	13.0	13.4	13.7	14.1	E# . 4	14./	15.1	12.4	13.1	10.0	10.0
17.0 17.5	0 1 0 4	10 1 1	A E 11		11 A	12.2 1	12.A 1	3.0 '	13.4	13.8	14.1	14.5	142.5	13.2	10.0	10.0	To • T	10.4	TO * 1
18.0 18.5	0 4 10 1	1061	1 0 11	1.2 11.7	12.4	19.R 1	12.2 1	3.7	14.1	14.5	14.9	15.4	1.2 m/O	10.0	10.0	10.1	I	1104	1 / • /
19.0	9.8 10.3 10.0 10.5	1001	1 2 11		12.7	12.1 1	12.6 1	4.0	14.4	14.8	13.2	12.0	10.00	10.4	10.0	1 (9 1	1100	71.0	10.6
19.5 20.0	14 2 10 7	11 2 1	1 7 17	2 12 8	122	12.7 1	14.2 1	4.7	15.1	15.5	16.0	10.4	10.0	11.6	1/.0	10.0	10.4	1001	17.1
20.5	10.2 10.7	11 / 1	2 1 1 2	2 6 12 0	12.5	14.n '	14.5 1	5.0	15.4	15.7	10.3	10.0	1106	T (• O	TO . O	1004	10.0	1,16	1,00
21.0 21.5		1101	2 / 12	2 4 12 6	1/. 1	14 6	15 1 1	5 6	16.1	16.6	17.1	1 / . 2	15.0	16.4	18.7	17.2	1701	70.1	20.0
22.0	10.9 11.5	12.1 1	2.7 13	3.2 13.8	14.4	14.9	15.4] 15.7]	16.0 16.3	16.5 16.8	17.3	17.8	18:3	18.8	19.2	19.7	20.1	20.6	21.0	21.5
22.5 23.0		12 5 1	2 1 12	2 7 14 2	14 9	15.5	1 6 . O 1		1 (- 1	1 (• 0	10./	10.7	17.1	17.0	20.1	20.0	21.0	- 1 - 1	
23.5 24.0	11.4 12.0 11.5 12.2		2 5 1/		15 4	14.0	16.6	17.2	17.8	18.7	18.9	19.4	19.9	20.4	20.7	61.4	21.7	4664	46.7
24.5		17 1 1	2 7 1/	15 1	15 7	16.7	16.9	17.5	18.1	18-/	19./	17.0	20.0	2U.O	41.7	Z 1 . U	4600	~ ~ ~ ~	20.0
25.0 25.5	11.9 12.4 11.9 12.6 12.0 12.7	17 / 1		. O 1E 5	167	1 6 0	17.5	1 M . 1	18.7	19-4	19.9	/11.3	2101	21.0	~~~	~~ "	2306		67.0
26.0	12.0 12.7 12.9 12.3 13.1	12 6 1	4 4 1 1	5.1 15.R	16.5	17.1	17.8	18.4	19.1	19.7	20.3	20.9	21.4	22.0	44.0	20 · L	2001	4.4	24.
26.5 27.0	10 / 13 7	1/01		E E 16 2	17 ^	177	18 4	19.0	19.7	20.3	21.0	71.0	22.2	22.8	23.4	24.0	24.0	20.1	60.0
27.5	12.4 13.2 12.6 13.4 12.7 13.5	14 2 1	4 9 1	5.7 16.5	17.2	17.9	18.6	19.3	20.0	20.7	21.3	21.9	22.0	60.6	20.0	24.4	20.0	20.0	20.1
28.0 28.5	12 8 12 7	14 5 1	E 2 1/	6 1 16 9	17.7	18.4	19.2	19.9	20.6	21.3	22.0	22./	23.3	24.0	24.0	22.4	20.0	20.4	21.0
29.0 29.5	13.0 13.8	14.7 1	15.5 10	6.3 17.1	17.9	18.7	19.5	20.2	20.9	22.0	22.7	23.4	24.1	24.7	25.4	26.1	26.7	27.3	28.0
30.0	13 2 1/ 1	16 0 1	1 K Q 1/	6.7 17 A	18.4	19.2	20.0	20.8	21.5	22.3	23.0	23.1	24.4	42.1	40.0	20.3	~ ' • 1	2 , . 0	20.4
30.5 31.0	13.3 14.2 13.4 14.4	15 2 1	14 2 1	7 1 18 0	18 9	19.7	20.5	21.3	22.1	72.9	23.7	24.4	42.4	42.7	20.0	21.3	20.0	20.1	47.7
31.5	13.6 14.5 13.7 14.6	15 / 1	16 / 1	7 2 18 2	10 1	10.0	2 A . R	71.A	77.4	74.7	74.0	24.0	20.0	20.5	21.0	2101	20.7	~ 7 + I	2,.0
32.0 32.5	13 8 14 7	1671	16 7 1	7 7 18 A	19.5	20.4	21.3	77.7	73.0	71.9	24.1	22.2	20.3	21.0	21.0	20.0	2762	20.0	201
33.0	13.9 14.9	15.9	16.9 1	7.8 18.8	19.7	20.7	21.6	22.5	23.5	24.2	25.3	26.2	27.0	27.8	28.6	29.4	30.1	30.9	31.7
33.5 34.0	14 1 15 1	14 1 1	17 2 1	9 2 19 2	20.2	21.1	22.1	23.0	23.9	24.8	25.6	20.5	21.3	20.2	29.0	27.0	20.0	2104	24.1
34.5	14.1 15.2	16.3	17.3 1	8.4 19.4	20.4	21.4	22.3	23.3	24.2	25.1	26.3	27.2	28.1	28.9	29.8	30.6	31.4	32.2	33.0
35.0 35.5	1/ 3 15 /	14 5	17 6 1	8 7 19 R	2 A . B	21.8	27.R	23.B	24.8	23.7	20.0	21.0	20.4	27.3	20.4	21.0	21.0	26.1	33.3
36.0 36.5	14.4 15.5 14.5 15.6	14 0	. 7 0 1	0 0 20 1	21.2	22.3	ງ ຊຸຊ	24.3	75.3	26.3	71.7	28.2	27.1	30.0	20.7	21.0	26.1	22.0	27.7
37.0	14.5 15.7 14.6 15.8	14 0		0 2 20 2	21 4	22.5	22.5	24.6	25.6	76.6	77.6	78.5	29.5	30.4	21.3	26.6	22.1	2 T . U	24.7
37.5 38.0	14 7 15 0	17 1	1021	9 5 20 7	21.R	22.9	24.0	75.1	26.1	77.7	28.2	27.2	30.4	21.1	32.1	22.0	2 T . U	27.7	22.0
38.5	14.7 16.0	17.2	18.4 1	9.6 20.8	22.0	23.1	24.2	25.3	26.7	27.7	28.8	29.8	30.9	31.9	32.9	33.8	34.8	35.8	36.7
39.0 39.5	14 0 14 1	17 4	19 7 1	0 0 21 2	22.4	23.5	24.7	25.8	26.9	28 • O	29.1	30.4	31.4	36.6	23.4	24.6	2206	20 · Z	2106
40.0	14.9 16.2	17.5	18.8 2	20.1 21.3	22.5	23.7	24.9	26.1	27.2	28.3	29.4	30.5	31.9	33.0	34.0	35.0	36.1	37.1	38.1
40.5 41.0	15 0 16 3	177	10 ^ 2) A 2 21 K	22 Q	24.1	25.4	26.6	27.1	2 K . 9	40.0	51.4	34.4	22.2	34.4		30.7	2102	3000
41.5 42.0	15.1 16.4	17 0	10 2 2	0 A 21 Q	22.3	24.5	25.R	27.0	28.3	29.4	30.0	91.0	34.7	24.0	22.1		21.0	20.7	2,,,
42.5	15.1 16.5 15.2 16.6	10 0	10 / 2	1 7 7 7 1	27.4	74.7	2 A . D	77.3	78.5	79.7	30.7	34.1	22.2	24.4	22.2	20.00	2101	20.0	3/1/
43.0 43.5	18 2 16 6	. 19 1	10 A 2	11 0 22.4	23.R	25.1	26.4	27.7	29.0	30.3	31.5	34.1	23.7	92 • L	20.2	21.7	20.0	27.1	40.0
44.0	15.2 16.7 15.2 16.7	10 2	10 7 2) 1) 7 5	22.9	25.3	26.6	28.O	79.3	30.5	31.8	39.0	34.3	22.2	20.0	, ,,,,	37.0	70.1	71.4
44.5 45.0	18 2 16 5	192	10 8 2) 1 2 99.R	24.2	25.7	27.1	28.4	29.8	31.1	32.4	33.1	34.7	20.2	31.4	, ,,,,	77.0	41.0	76.1
45.5	15.3 16.6	18.4	19.9 2	21.4 22.9	24.4	25.8	27.5	28.6	30.0	31.4	32.7	34.0	35.6	36.9	38.1	39.4	40.6	41.8	43.0
46.0 46.5	18 2 14 5	10 5	20 1 2	วเ 7 วว ว	24 7	26.2	27.7	79.1	30.5	31.9	33.7	34.0	99.7	21.4	25.2	, ,,,,,	, 41.0	76.0	40.0
47.0	15.3 16.9	18.5	20.2 2	21.8 23.3	24.9	26.4	27.8	29.3	30.7	32.1	33.5	34.9	36.6	37.9	39.2	40.2	41.8	43.1	44.4
47.5 48.0	16 2 17 6	186	2 0 2 2	22 A 23.6	25.1	26.7	2 R . 2	29.7	31.7	32.7	34.1	30.0	20.7	20.6	27.0	, , , , ,	42.6	. 43.0	77.0
48.5 49.0	15.3 17.0	18.7	20.4 2	22.0 23.7	25.3	26.9	28.4	29.9	31.4	32.9	34.4	35.0	37.5	38.9	40.0	3 41.7	43.1	44.4	45.7
49.5	16 3 17 /		3 A E 3	?? ? ? ? 0	25 6	77 2	28 A	70.4	71.0	77.4	46.9	40.4	3/.0	27.2	40.	44.1		, ,,,,,	70.2
50.0	15.3 17.0	18.8	20.6	22.3 24.0	25.7	27.3	29.0	30.6	22.1	55.7	33.2	20.1	50.2	37.0	71.	. 72.	, , , , ,	. 42.3	

STUMP DDB	0.0	0.2	0.4	0.6	0.8					EIGHT 1.8		FEET) 2.2	2.4	2,6	2.8	3.0	3.2	3.4	3.6	3.8	4.0
5.0	3.7	3.9	4.0	4.1	4.2	4.3	4.3	4.4	4.5	4.5 5.0	4.6 5.0	4.6 5.1	4.7 5.1	4.7 5.2	4.7 5.2	4.8 5.3	4.8 5.3	4.8 5.3	4.9 5.4	4.9 5.4	4.9 5.4
5.5 6.0	4.1 4.5	4.2	4.4 4.8	4.5 4.9	5.0	4.7 5.1	5.2	5.3	5.4	5.4	5.5	5.5	5.6	5.6	5.7	5.7	5.8	5.8	5.9	5.9	5.9
6.5	4.8	5.0	5.2	5.3	5.4	5.5	5.6	5.7	5.8 6.2	5.9 6.3	5.9 6.4	6.0 6.5	6.1	6.1	6.2 6.6	6.2	6.3	6.8	6.3 6.8	6.4	6.4
7.0 7.5	5.2 5.6	5.4 5.8	5.6 6.0	5.7 6.1	5.9 6.3	6.0	6.1 6.5	6.2	6.7	6.8	6.9	6.9	7.0	7.1	7.1	7.2	7.2	7.3	7.3	7.4	7.4
8.0	5.9	6.2	6.4	6.5	6.7	6.8	6.9	7.0	7.1	7.2	7.3	7.4	7.5 7.9	7.5 8.0	7.6 8.1	7.6 8.1	7.7 8.2	7.7 8.2	7.8 8.3	7.8 8.3	7. 9 8.4
8.5 9.0	6.3 6.7	6.6	6.8 7.2	7.0 7.4	7.1 7.5	7.2 7.7	7.4 7.8	7.5 7.9	7.6 8.0	7.7 8.1	7.8 8.2	7.8 8.3	8.4	8.5	8.5	8.6	8.7	8.7	8.8	8.8	8.9
9.5	7.1	7.3	7.6	7.8	7.9	8.1	8.2	8 • 4	8.5	8.6	8.7	8.8	8.8	8.9	9.0	9.1	9.1	9.2 9.7	9.3 9.7	9.3 9.8	9.4 9.9
10.0 10.5	7.4 7.8	7.7 8.1	8.0 8.4	8.2	8 • 4 8 • 8	8.5 8.9	8.7 9.1	8 • 8 9 • 2	8.9 9.4	9.0 9.5	9.1 9.6	9.2 9.7	9.3 9.8	9.4 9.9	9.5 9.9	9.5	9.6 10.1	10.2	10.2	10.3	10.4
11.0	8.2	8.5	8.8	9.0	9.2	9.4	9.5	9.7	9.8	9.9	10.0	10.1	10.2	10.3	10.4	10.5	10.6	10.7	10.7	10.8	10.9
11.5	8.5 8.9	8.9 9.3	9.2 9.6	9.4	9.6	9.8	10.4	10.1	10.3	10.4	10.5	10.6	10.7	10.8	11.4	11.5	11.5	11.6	11.7	11.8	11.8
12.0 12.5	0 3	0 4	0 0	10 2	10 4	10 6	10.8	11.0	11.1	11.3	11.4	11.5	11.6	11.7	11.8	11.9	12.0	12.1	12.2	12.3	14.3
13.0	100	10 4	107	11 0	11 2	115	11.7	11.9	12.0	11.7	12.3	12.4	12.6	12.7	12.5	12.7	13.0	10.1	10.6	13.6	13.3
13.5 14.0	10 /	100	111	11 /	117	11 0	12 1	12.2	12.5	12.6	12.R	12.9	13.0	13.2	13.3	19.4	13.2	13.0	10.0	1001	10.0
14.5	10.7	11 2	11 5	11 A	12.1	12.3	12.6	12.7	12.9	13.1	13.2	13.4	13.5	13.0	13./	13.0	13.9	14.0	T + • T	14.2	14.2
15.0 15.5	115	11 9	123	12 7	12.9	13.2	13.4	13.6	13.8	14.0	14.1	14.3	14.4	14.0	14.7	14.8	14.9	12.0	15.1	12.6	12.2
16.0	11 0	122	127	12 1	12.4	13.6	12.8	14.1	14.3	14.4	14.6	14.8	14.9	15.0	15.2	15.3	15.4	10.0	10.0	10.7	10.5
16.5 17.0	12 6	12 1	12 5	120	14.2	14.5	14.7	14.9	15.1	15.3	15.5	15.7	15.8	10.0	10.1	10.2	10.3	10.7	10.0	10.7	10.0
17.5	13 0	12 6	120	1 / 2	16 6	14 0	15 1	15.4	15.6	15.8	16.0	16.1	16.3	16.4	1020	10./	10.8	10.7	1/•1	1(+2	11.0
18.0 18.5	137	14 2	14 7	15 1	15.4	15.7	16.0	16.3	16.5	16.7	16.9	17.0	17.2	1/.4	1 / • 27	:1/./	1/.5	11.7	10.0	T o • T	10.7
19.0	1 / 1	3 / 6	15 1	15 5	15.8	16.2	14.4	16.7	16.9	17.1	17.3	17.5	17.7.	1/.5	18.03	-10 · 1	18.3	10.4	10.0	10.0	10.1
19.5 20.0	17. 8	15 4	15 9	16 2	16.7	17.0	17.3	17.6	17.8	17.6	18.2	18.4	18.6	18.5	10.9	17.1	17.4	17.4	17.0	17.0	17.1
20.5	18 2	16.0	16 3	16 7	17.1	17.4	17.7	18.0	18.3	18.5	18.7	18.9	19.1	19.2	19.4	19.6	19.7	19.8	20.0	20.1	20.2
21.0 21.5	1 . 0	14 5	177 1	17 5	17 9	18 2	18.6	18.9	19.1	18.9	19.6	19.8	20.0	20.2	20.4	20.5	20.7	20.8	20.9	21.1	41.4
22.0	14 3	16 0	175	17 0	10 2	18.7	19.0	19.3	19.6	19.8	20.1	20.3	20.5	20.6	20.8	21.0	21.1	41.3	21.4	41.0	21.1
22.5 23.0	17 0	17 7	18 3	18 7	19 2	19.5	19.9	20.2	20.5	20.3	21.0	21.2	21.4	21.6	21.8	21.9	22.1	44.3	42.4	44.0	46.1
23.5	17 4	10 1	10 6	10 1	10 6	20 0	20.3	20.6	20.9	21.2	21.4	21.6	21.9	22.1	22.2	22.4	22.6	26.1	24.7	23.0	62.6
24.0 24.5	101	18 8	10 4	20 0	20.4	20 - R	21.7	21.5	21.8	21.6	22.3	22.6	22.8	23.0	63.6	23.4	63.7	20.1	22.7	24 + U	44.6
25.0	10 5	10 2	10 8	20 4	20.8	21.2	21.6	21.9	22.2	22.5	22.8	23.0	23.2	23.3	23.1	49.0	24.0	24.2	24.4	24.0	44.1
25.5 26.0	10 2	20 0	20 6	21 2	21 7	22 1	22.5	22.8	22.1	23.0 23.4	23.7	23.9	24.2	24.4	24.0	24.8	25.0	40.4	20.0	47.0	20.0
26.5	10 6	20 4	21 0	21 6	22.1	22.5	22.9	23.2	23.6	23.9	24.1	24.4	24.6	24.9	25.1	25.5	20.0	42,0	20.0	20.0	20.1
27.0	19.9	20.7	21.4	22.0	22.5	22.9	23.3	23.7	24.0	24.3	25.0	24.9	25.6	25.8	26.0	26.2	26.4	26.6	26.8	27.0	27.1
27.5 28.0	20.7	21 5	22 2	22 8	22.2	22.R	24.2	24.6	24.9	25.2	25.5	25.8	26.0	20.3	20.5	20./	20.9	2101	21.3	21.4	21.0
28.5 29.0	21 /	22	22 0	22 6	24.1	24.6	25.0	25.4	25.8	25.7 26.1	26.4	26.7	27.0	27.2	27.4	2/./	2/.9	28.1	20.2	20.4	20.0
29.5	21 8	22 A	22 4	24 0	24.5	25.0	25.5	25.9	26.2	26.6	26.9	71.2	27.4	21.1	21.9	20.1	20.3	20.3	20.1	20.7	47.1
30.0	22.1	22 0	22 B	24 4	25 0	25.5	25.9	26.3	26.7	27.0	27.3	27.6	27.9	28.1	20.4	20.0	∠8.8	27.0	67.6	6704	27.0
30.5 31.0	22 9	22 8	24 6	25 2	25.8	26.3	26 - 8	27.2	27.6	27.9	28.2	28.5	28.8	29.1	29.3	29.6	29.8	30.0	30.2	30.4	30.0
31.5	23.2 23.6		24.9	25.6	26.2	26.7	27.2	27.6	28.0	28.3 28.8	28.7	29.0	29.3	30.0	30.3	30.5	30.7	31.0	31.2	31.4	31.6
32.0 32.5	24 0	24 9	25 7	26 4	27.0	27.6	28.0	28.5	28.9	29.2	29.6	29.9	30.2	30.5	30.7	31.0	31.2	31.4	31.1	31.9	32.0
33.0	24.3	25.3	26.1	26.8	27.4	28.0	28.5	28.9	29.3	29.7 30.1	30.0	30.4	30.7	30.9	31.2	31.9	31.7	32.4	32.6	32.8	33.0
33.5 34.0	25 0	26 1	26 0	27 6	28.3	28.8	20.3	20.8	30.2	30.6	30.9	31.3	31.6	31.9	32.1	32.4	32.7	32.9	33.1	99.3	33.2
34.5	25.4	26.4	27.3	28.0	28.7	29.2	29.8	30.2	30.6	31.0 31.5	31.4	31.7	32.0	32.3	32.6	32.9	33.1	33.4	34.1	34.3	34.5
35.0 35.5	24 1	27 2	28 1	200	20 5	20 1	20 A	21.1	21.5	31.9	32.3	37.6	33.0	33.3	33.0	33.0	34.1	24.2	24.0	24.0	27.0
36.0	26.5	27.6	28.5	29.2	29.9	30.5	31.0	31.5	32.0	32.4	32.8	33.1	33.4	33.7	34.5	34.8	35.0	35.3	35.5	35.8	36.0
36.5 37.0	27 2	28 2	29 3	30 0	30.7	21.4	31.9	32.4	32.9	33.3	33./	34.0	34.4	34.1	30.0	22.2	30.0	22.0	90.0	20.0	20.7
37.5	27.6	28.7	29.7	30.5	31.2	31.8	32.3	32.8	33.3	33.7	34.1	34.5	34.8	35.1 35.6	35.4	35.7	36.5	36.7	37.0	37.2	37.5
38.0 38.5	20 3	20 5	30 4	212	22 0	22 6	22 2	22.7	24.2	34.6	35.0	35.4	35.7	36.1	30.4	30./	37.0	31.6	31.0	21.1	30.0
39.0	207	200	an R	21 7	22 4	22 0	. 22.6	34.1	34.6	35.1 35.5	35.5	35.9	36.2	36.5	30.7	31.2	3/.4	21.1	20.0	20.2	20.2
39.5 40.0	20 4	30 6	. 21 6	22 5	22 2	22 9	24.5	25.0	35.5	36.0	36.4	36.8	37.1	37.5	37.8	30.1	38.4	30.1	30.7	37.2	27.4
40.5	20.0	21 6		220	22 6	24 2	24 9	25.4	25.0	36.4	36.8	37.2	37.6	3/.9	38.3	38.0	48.9	37.2	37.4	37.1	37.7
41.0 41.5	2 0 5	317	7 22 8	227	24.4	35.1	25.7	36.3	36.8	37.3	37.7	7 38.1	38.5	38.7	39.4	37.0	37.0	40.1	40.4	40.7	40.9
42.0	20 9	22.1	33.2	34 1	34.9	35.6	36.2	36.7	37.3	37.7 38.2	38.2	38.6	39.0	39.3	39.1	40.0	40.3	40.0	40.7	41.6	41.4
42.5 43.0	21 6	. 22 0	24 0	34 0	25 7	36 4	. 27.0	37.6	38.1	38.6	39.1	39.5	39.9	40.3	40.0	41.0	41.3	41.0	41.9	42.1	42.4
43.5	219	22 7	1 24 3	25 2	36.1	36.8	1 37.5	38.0	38.6	39.1	39.5	40.0	40.4	40.7	41.1	41.4	41.8	42.1	. 42.5	42.0	42.7
44.0 44.5	32 7	1 24 6	3 3 5 1	36 1	34 0	37.6	32.3	38.9	30.5	40.0	40.4	+ 40.9	41.3	41.7	42.0	42.4	42.7	43.0	43.3	49.0	49.9
45.0	22 2	1 24 4	. 25 5	34 5	373	. วล 1	38.7	30.3	39.9	40.4	40.9	41.3	41.7	42.1	42.3	42.9	43.2	43.2	49.0	44.1	. 44.4
45.5 46.0	22 6	3 3 5 1	1 36 2	27 2	1 38 1	38.9	39.A	40.2	40.8	40.9	41.8	3 42.2	42.7	43.1	43.4	43.8	44.1	44.5	44.5	47.	. 40.0
46.5	34. 1	25 1	5 36 7	7 27 7	7 28.5	39.3	40.0	40.6	41.2	41.8	42.7	42.7	43.1	43.5	43.9	44.3	44.0	44.7	47.5	47.0) +2.0
47.0 47.5	3 / 6	3 3 4 7	2 27 6		39.4	40.2	40.9	41.5	42.1	42.2	43.	43.6	44.1	44.5	44.5	45.2	45.0	47.7	40.2	40.	90.5
48.0	25 1	26 4	6 27 S	28 0	20 A	40 6	. 41.3	41.9	42.5	5 43.1	43.6	5 44.1	44.5	44.9	45.3	45.7	46.1	40.4	40.	4/•() 41.3
48.5 49.0	25.0	37.4	4 38 6	39.7	7 40.6	41.4	42.1	42.5	43.4	43.5	44	5 45.0	45.4	45.9	40.3	40.0	4/•0	4/.4	4/•	40.() 40.5
49.5	26	27.	a 39.0	1 40 1	41.0	41.8	42.6	43.2	43.9	44.4	45.0) 45.4	45.9	46.3	46.7	4/.1	47.5	4/.	48.2	40	40.0
50.0	36.0	38.	2 39.4	40.	41.4	42,3	43.0	49.1	44.3	3 44.9	47.	, 43.7	+0,4	0.0	· - · · ·	. 71.0	0.0		, ,,,,	~ > • (, .,,,

STUMP DOB	0.0	0.2 0.	4 0.6	0.8							FEET 2.2			2.8		3.2	3.4	3.6	3.8	4.0
5.0 5.5		3.7 3.		4.1 4.5	4.2 4.6	4.3	4.4	4.5	4.5 5.0	4.6 5.0	4.6 5.1	4.7 5.1	4.7 5.2	4.8 5.2	4.8 5.3	4.8 5.3	4.9 5.3	4.9 5.4	4.9 5.4	4.9
6.0 6.5		4.		4.9 5.3	5.1 5.5	5.2 5.6	5.3 5.7	5.3 5.8	5.4 5.9	5.5 5.9	5.6 6.0	5.6 6.1	5.7 6.1	5.7 6.2	5.8 6.2	5.8 6.3	5.8	5.9 6.4	5.9 6.4	5.9 6.4
7.0	4.8 5	1.1 5.	3 5.6	5.7	5.9	6.0	6.1	6.2	6.3	6.4	6.5	6.5	6.6	6.7	6.7	6.8	6.8	6.8	6.9	6.9
7.5 8.0	5.4 5	6.4 5. 6.8 6.	1 6.3	6.5	6.7	6.9	6.6 7.0	6.7 7.1	6.8 7.2	6.8 7.3	6.9 7.4	7.0 7.5	7.1 7.5	7.1 7.6	7.2 7.7	7.2 7.7	7.3 7.8	7.3 7.8	7.4	7.4
8.5 9.0		0.2 6. 0.5 6.		6.9 7.3	7.1 7.5	7.3 7.7	7.4 7.8	7.5 8.0	7.6 8.1	7.7	7.8 8.3	7.9 8.4	8.0 8.5	8.1	8.1	8.2	8.2	8.3	8.4	8.4 8.9
9.5 10.0	6.4 6	.9 7. '.2 7.	2 7.5	7.7 8.1	7.9 8.3	8.1	8.3	8.4	8.5	9.1	8.7 9.2	8.8	8.9 9.4	9.0	9.1	9.1	9.2	9.3	9.3	9.4
10.5	7.1 7	.6 7.	9 8.3	8.5	8.7	8.9	9.1	9.3	9.4	9.5	9.7	9.8	9.9	9.9	10.0	10.1	10.2	10.2	10.3	10.4
11.0 11.5	7.7 8	'.9 8. 3.2 8.	7 9.0	8.9 9.3	9.2				10.3	10.4	10.6	10.7	10.8	10.4	11.0	11.1	11.1	11.2	11.3	11.3
12.0 12.5		1.6 9. 1.9 9.		9.7 10.1	10.0	10.2	10.4	10.6	10.7	10.9	11.0	11.1	11.2	11.4	11.4	11.5	11.6	11.7 12.2	11.8	11.8
13.0 13.5		9.3 9. 9.6 10.	8 10.1	10.5	10.8	11.0	11.2	11.4	11.6	11.8	11.9	12.0	12.2	12.3	12.4	12.5	12.6	12.7	12.7	12.8
14.0 14.5	9.3 10	.0 10.	5 10.9	11.3	11.6	11.8	12.1	12.3	12.5	12.7	12.8	13.0	13.1	13.2	13.3	13.4	13.5	13.6	13.7	13.8
15.0	9.9 10).3 10.).6 11.	2 11.6	12.0	12.4	12.7	12.9	13.1	13.4	13.5	13.7	13.9	14.0	14.1	14.3	14.4	14.5	14.6	14.7	14.8
15.5 16.0	10.2 11																			
16.5 17.0	10.9 11																			
17.5 18.0	11.5 12	.3 12.	9 13.5	13.9	14.3	14.7	15.0	15.3	15.5	15.7	15.9	16.1	16.3	16.5	16.6	16.8	16.9	17.0	17.1	17.2
18.5	11.8 12 12.1 13	.0 13.	6 14.2	14.7	15.1	15.5	15.8	16.1	16.4	16.6	16.8	17.0	17.2	17.4	17.5	17.7	17.8	18.0	18.1	18.2
19.0 19.5	12.4 13 12.7 13																			
20.0 20.5	13.0 13 13.3 14																			
21.0	13.6 14 13.9 14	.6 15.	4 16.0	16.6	17.1	17.5	17.9	18.2	18.5	18.8	19.0	19.3	19.5	19,7	19.9	20.1	20.2	20.4	20.5	20.7
22.0	14.2 15	.2 16.	1 16.7	17.3	17.8	18.3	18.7	19.0	19.3	19.6	19.9	20.2	20.4	20.6	20.8	21.0	21.2	21.3	21.5	21.6
22.5 23.0	14.5 15 14.8 15																			
23.5 24.0	15.1 16 15.4 16																			
24.5 25.0	15.6 16 15.9 17	.8 17.	7 18.5	19.2	19.7	20.2	20.7	21.1	21.5	21.8	22.1	22.4	22.6	22.9	23.1	23.3	23.5	23.7	23.9	24.1
25.5	16.2 17	.4 18.	4 19.2	19.9	20.5	21.0	21.5	21.9	22.3	22.6	23.0	23.3	23.5	23.8	24.0	24.3	24.5	24.7	24.9	25.1
26.0 26.5	16.5 17 16.8 18	1.1 19.	1 19.9	20.6	21.3	21.8	22.3	22.7	23.1	23.5	23.8	24.1	24.4	24.7	25.0	25.2	25.4	25.6	25.8	26.0
27.0 27.5	17.1 18 17.4 18	.7 19.	7 20.6	21.4	22.0	22.6	23.1	23.5	24.0	24.3	24.7	25.0	25.3	25.6	25.9	26.1	26.4	26.6	26.8	27.0
28.0 28.5	17.6 19 17.9 19																			
29.0 29.5	18.2 19 18.5 19	.6 20.	7 21.6	22.4	23.1	23.7	24.3	24.8	25.2	25.6	26.0	26.3	26.7	27.0	27.3	27.5	27.8	28.0	28.3	28.5
30.0	18.7 20	.2 21.	3 22.3	23.1	23.9	24.5	25.1	25.6	26.0	26.5	26.8	27.2	27.5	27.9	28.2	28.5	28.7	29.0	29.2	29.5
31.0	19.0 20 19.3 20	.8 22.	0 23.0	23.8	24.6	25.2	25.8	26.4	26.8	27.3	27.7	28.1	28.4	28.8	29.1	29.4	29.7	29.9	30.2	30.4
31.5 32.0	19.6 21																			
32.5 33.0	20.1 21																			
33.5 34.0	20.6 22	.3 23.	6 24.7	25.6	26.4	27.1	27.8	28.4	28.9	29.4	29.8	30.2	30.6	31.0	31.4	31.7	32.0	32.3	32.6	32.9
34.5	21.2 22	.8 24.	2 25.3	26.3	27.1	27.9	28.5	29.1	29.7	30.2	30.7	31.1	31.5	31.9	32.3	32.6	32.9	33.2	33.5	33.8
35.0 35.5	21.4 23 21.7 23	3.1 24. 3.4 24.	5 25.7 8 26.0	27.0	27.9	28.3	28.9	29.5	30.1	30.6	31.1	31.5	32.0	32.3	32.7 33.2	33.1 33.5	33.4 33.9	33.7 34.2	34.0 34.5	34.3 34.8
36.0 36.5	22.0 23 22.2 24																			
37.0 37.5	22.5 24 22.7 24	.3 25.	7 27.0	28.0	28.9	29.7	30.5	31.1	31.7	32.3	32.8	33.3	33.7	34.1	34.5	34.9	35.3	35.6	35.9	36.3
38.0	23.0 24	.8 26.	3 27.6	28.7	29,6	30.5	31.2	31.9	32.5	33.1	33.6	34.1	34.6	35.0	35.4	35.8	36.2	36.6	36.9	37.2
38.5 39.0	23.2 25 23.5 25																			
39.5 40.0	23.7 25 24.0 26																			
40.5 41.0	24.2 26 24.5 26	.2 27.	9 29.2	30.4	31.4	32.3	33.1	33.8	34.5	35.1	35.7	36.2	36.7	37.2	37.7	38.1	38.5	38.9	39.3	39.6
41.5	24.7 26	.8 28.	4 29.8	31.0	32.1	33.0	33.8	34.6	35.3	35.9	36.5	37.1	37.6	38.1	38.6	39.0	39.4	39.8	40.2	40.6
42.0 42.5	25.0 27 25.2 27	'.3 29.	0 30.5	31.7	32.8	33.7	34.6	35.4	36.1	36.7	37.4	37.9	38.5	39.0	39.5	39.9	40.4	40.8	41.2	41.6
43.0 43.5	25.5 27 25.7 27	7.6 29. 7.9 29.	3 30.8 6 31.1	32.0	33.1 33.5	34.1 34.4	35.0 35.3	35.7 36.1	36.5 36.9	37.1 37.5	37.8 38.2	38.3	38.9	39.4 39.9	39.9	40.4	40.8	41.3	41.7	42.1 42.5
44.0 44.5	26.0 28 26.2 28	0.1 29.	9 31.4	32.7	33,8	34.8	35.7	36.5	37.3	37.9	38.6	39.2	39.8	40.3	40.8	41.3	41.7	42.2	42.6	43.0
45.0	26.4 28	1.7 30.	5 32.0	33.3	34.5	35.5	36.4	37.3	38.0	38.7	39.4	40.0	40.6	41.2	41.7	42.2	42.7	43.1	43.6	44.0
45.5	26.7 28 26.9 29).2 31.	1 32.6	34.0	35,2	36.2	37.2	38.0	38.8	39.5	40.2	40.9	41.5	42.0	42.6	43.1	43.6	44.1	44.5	45.0
46.5 47.0	27.1 29 27.4 29).5 31.	3 32.9	34.3	35.5	36.6	37.5	38.4	39.2	39.9	40.6	41.3	41.9	42.5	43.0	43.5	44.0	44.5	45.0	45.4
47.5 48.0	27.6 30 27.8 30	0.0 31.	9 33.5	34.9	36,2	37.3	38.2	39.1	40.0	40.7	41.4	42.1	42.7	43.3	43.9	44.4	45.0	45.5	45.9	46.4
48.5	28.1 30	.5 32.	5 34.1	35.6	36.8	38.0	39.0	39.9	40.7	41.5	42.3	42.9	43.6	44.2	44.8	45.3	45.9	46.4	46.9	47.4
49.0 49.5	28.3 30	0 33.	0 34.7	36.2	37.5	38.6	39.7	40.6	41.5	42.3	43.1	43.8	44.4	45.1	45.7	46.2	46.8	47.3	47.8	48.3
50.0	28.7 31	3 33.	3 5. 0	36.5	37.8	39.0	40.0	41.0	41.9	42.7	43.5	44.2	44.9	45.5	46.1	46.7	47.3	47.8	48.3	48.8

STUMP DOB	0.0	0.2	0.4	0.6	0.8		1.2					FEET) 2.2	2.4	2,6	2.8	3.0	3.2	3.4	3.6	3.8	4.0
5.0 5.5	3.6 3.9	3.8 4.2	4.0	4.1 4.5	4.3	4.4 4.8	4.5	4.5 5.0	4.6 5.0	4.6 5.1	4.7 5.2	4.7 5.2	4.8 5.3	4.8 5.3	4.8 5.3	4.9 5.4	4.9 5.4	4.9 5.4	4.9 5.4	5.0 5.4	5.0 5.5
6.0	4.2	4.5	4.8	5.0	5.1	5.2	5.3	5.4	5.5	5.6	5.6	5,7	5.7	5.8	5.8	5.8	5.9	5.9	5.9	5.9	6.0
6.5 7.0	4.6	4.9 5.3	5.2 5.6	5.4 5.8	5.5 5.9	5.7 6.1	5.8 6.2	5.9 6.3	6.0	6.0	6.1	6.2 6.6	6.2 6.7	6.2 6.7	6.8	6.8	6.4 6.8	6.4	6.4	6.9	7.0
7.5	5.3	5.7	5.9	6.2	6.4	6.5	6.6	6.8	6.9 7.3	6.9 7.4	7.0 7.5	7.1 7.6	7.1 7.6	7.2 7.7	7.2 7.7	7.3 7.8	7.3 7.8	7.4 7.8	7.4 7.9	7.4 7.9	7.4
8.0 8.5	5.6 6.0	6.0	6.7	6.6 7.0	6.8 7.2	6.9 7.4	7.1 7.5	7.2 7.6	7.8	7.9	7.9	8.0	8.1	8.2	8.2	8.3	8.3	8.3	8.4	8.4	8.4
9.0 9.5	6.3	6.8 7.1	7.1 7.5	7.4 7.8	7.6 8.0	7.8 8.2	8.0 8.4	8 • 1 8 • 5	8.2 8.7	8.3 8.8	8.4 8.9	8.5 9.0	8.6 9.0	8.6 9.1	8.7 9.2	8.7 9.2	8.8 9.3	8.8 9.3	8.9 9.4	8.9 9.4	8.9 9.4
10.0	7.0	7.5	7.9	8.2	٤.4	8.6	8.8	9.0	9.1	9.2	9.3	9 • 4	9.5	9.6	9.6	9.7	9.8	9.8	9.8	9.9	9.9
10.5 11.0	7.3 7.7	7.8 8.2	8.2 8.6	8.6 9.0	8.8 9.2	9.1 9.5	9,2 9.7	9.4 9.9	9.6 10.0	10.1	10.2	10.3	10.4	10.5	10.6	10.7	10.7	10.8	10.8	10.9	10.9
11.5 12.0	8.0	8.6	9.0 9.4	9.4	9.7 10.1	10.3	10.1	10.7	10.9	11.0	11.2	11.3	11.4	11.5	11.5	11.6	11.7	11.7	11.8	11.9	11.9
12.5	8.7	0.3	Q A	101	10.5	10.7	11.0	11.2	11.3	11.5	11.6	11.7	11.8	11.9	12.0	12.1	12.2	12.2	12.3	12.3	12.4
13.0 13.5	9.0 9.3	10.0	10.5	10.9	10.9	11.6	11.8	12.0	12.2	12.4	12.5	12.7	12.8	12.9	13.0	13.1	13.1	13.2	13.3	13.3	13.4
14.0 14.5	9.6	10.3	10.9	11.3	11.7	12.4	12.7	12.5	12.7	12.8	13.4	13.1	13.2	13.8	13.4	14.0	14.1	14.2	14.2	14.3	14.4
15.0	10 3	11 0	11 A	12 1	12.5	12.8	12.1	13.3	13.5	13.7	13.9	14.0	14.2	14.3	14.4	14.5	14.6	14.7	14.7	14.5	14.9
15.5 16.0	10.9	11.7	12.4	12.9	12.9	13.6	13.9	14.2	14.4	14.6	14.8	15.0	15.1	15.2	15.3	15.4	15.5	15.0	10./	10.8	12.5
16.5	11.3	12.1	12.7	13.3	13.7	14.0	14.4	14.6	14.9	15.1	15.2	15.4	15.6	10./	15.0	12.9	10.0	10.1	10.7	10.3	10.3
17.0 17.5	11 9	12.B	13.5	14 0	14.5	14.9	15.2	15.5	15.7	15.9	16.1	16.3	16.5	16.6	16.7	16.9	17.0	17.1	17.2	17.2	17.3
18.0 18.5	12.5	13.5	14.2	14 B	14.9 15.3	15.7	16.0	16.3	16.6	16.8	17.0	17.2	17.4	17.5	17.73	17.8	17.9	18.0	18.1	18.2	10.3
19.0	128	12.8	14.6	15 2	15.7	16.1	16-4	16.8	17.0	17.3	17.5	17.7	17.9	18.0	18.Z	78.3	18.4	18.5	10.0	10.7	10.0
19.5 20.0	125	14.5	15.3	15.0	16.4	16.9	17.3	17.6	17.9	18.2	18.4	18.6	18.8	18.9	19.1	19.2	19.4	19.0	19.0	19.7	19.5
20.5 21.0	14.1	15.2	16.0	16.7	16.8	17.7	18.1	18.5	18.8	19.0	19.3	19.5	19.7	19.9	20.0	20.2	20.3	20.4	20.6	20.7	20.8
21.5	14.4	15.5	16-4	17.0	17.6	18.1	18.5	18.9	19.2	19.5	19.7	19.9	20.1	20.3	20.5	20.6	20.8	20.9	21.0	21.2	21.5
22.0 22.5	15 0	16.2	17.1	17 R	18.4	18.9	19.3	19.7	20.0	20.3	20.6	20.8	21.1	21.2	21.4	21.6	21.7	21.9	22.0	22.1	64.6
23.0 23.5	15.3	16.5	17.8	18.5	18.8	19.7	20.2	20.5	20.9	21.2	21.5	21.7	22.0	22.2	22.4	22.5	22.7	22.8	23.0	23.1	23.4
24.0	1 6 0	17 2	18 1	18 0	19.5	20.1	20.6	21.0	21.3	21.6	21.9	22.7	22.4	22.0	22.8	23.0	43.4	20.3	23.3	40.0	43.1
24.5 25.0	14 5	17 0	188	10 6	20.3	20.9	21.4	21.8	22.2	22.5	22.B	23.1	23.3	23.5	23.8	23.9	24.1	24.3	24.4	24.0	24.1
25.5 26.0	16.8	18.1	19.2	20.0	20.7	21.3	21.8	22.2	22.6	22.9	23.2	23.5	23.8	24.0	24.2	24.4	25.1	25.2	25.4	25.5	25.7
26.5	17.4	18.8	19.9	20.7	21.4	22.1	22.6	23.0	23.4	23.8	24.1	24.4	24.7	24.9	25.1	25.3	29.5	25.7	23.9	20.0	20.2
27.0 27.5	18 0	19 4	20.5	21 4	21.8	22 - B	23.4	23.9	24.3	24.7	25.0	25.3	25.6	25.8	26.1	26.3	26.5	26.7	26.8	27.0	27.2
28.0 28.5	10 2	10 8	20 9	21 8	22.6	23.2	22. A	24.3	24.7	25.1	25.4	25.7	26.0	26.3	26.5	26.7	26.9	2/.1	21.3	2/•5	2/.0
29.0	189	20.4	21.6	22.5	23.3	24.0	24.6	25.1	25.5	25.9	26.3	26.6	26.9	27.2	27.4	2/./	27.9	28.1	28.3	20.5	20.0
29.5 30.0	19.2	20.7	22.2	23.2	23.7	24.B	25.4	25.9	26.4	26.8	27.2	27.5	27.8	28.1	28.4	28.6	28.8	29.0	29.2	29.4	27.0
30.5 31.0	10 8	21 2	22 6	22 6	24.4	25.2	25.A	26.3	26.8	27.2	27.6	27.9	28.3	28.6	28.8	29.1	29.3	29.5	29.7	29.9	30.1
31.5	20.3	22.0	23.3	24.3	25.2	25.9	26.6	27.1	27.6	28.1	28.5	28.8	29.2	29.5	29.1	30.0	30.2	20.2	30.1	30.9	21.1
32.0 32.5	20.9	22.6	23.9	25.0	25.5	26.7	27.3	27.9	28.4	28.9	29.3	29.7	30.0	30.4	30.6	30.9	31.2	31.4	31.0	31.8	32.0
33.0	21 2	22 0	24 2	25 4	26.3 26.6	27.1	27.7	28.2	28.9	29.3	29.7	30.1	30.5	30.8	31.1	31.4	31.6	31.9	32.1	32.3	32.5
33.5 34.0	217	23.5	24.9	26 O	27.0	27.8	28.5	29.1	29.7	30.2	30.6	31.0	31.4	31.7	32.0	36.3	32.0	22.0	99.1	99.9	22.2
34.5 35.0	22 3	24 1	25 6	26 7	27.4	28.6	29.3	29.9	30.5	31.0	31.5	31.9	32.3	32.0	32.9	33.2	33.5	33.8	34.0	34.3	34.2
35.5	22 6	24 4	25.9	27 1	28.1 28.4	2 A . 9	29.7	30.3	30.9	31.4	31.9	32.3	32.7	33.0	33.4	33.7	34.0	34.2	34.5	34./	32.0
36.0 36.5	22 1	25.0	26.5	27 B	28.8	29.7	30.4	31.1	31.7	37.2	32.7	33.2	33.6	33.7	34.3	34.0	34.9	32.6	30.0	32.1	37.7
37.0 37.5	22 7	25.6	27.2	28 4	29.2	30.4	31.2	31.9	32.5	33.1	33.6	34.0	34.4	34.5	35.2	35.5	35.8	30.1	30.4	30.1	30.7
38.0	22.9	25.9	27.5	2 A . A	29.9	30.8	31.6	32.3	32.9	33.5	34.0	34.5	34.9	35.3	35.0	30.0	36.3	30.0	30.7	31.2	31.4
38.5 39.0	24 5	26.5	28 1	29 S	30.6	31.5	22.4	22.1	33.7	34.3	34.8	35.3	35.8	36.2	30.5	36.9	37.2	31.3	3/.0	30.1	30.4
39.5 40.0	25 ()	27.1	28.8	30 1	30.9	32.3	22.1	33.9	34.5	35.1	35.7	36.2	36.6	37.1	37.4	37.8	38.2	30.5	30.0	37.1	37.4
40.5	25 2	27.4	29.1	20 5	31.6	32.6	22.5	34.3	34.9	35.5	36.1	36.6	37.1	37.5	37.9	38.3	38.6	38.9	37.3	37.6	39.8
41.0 41.5	25 8	2 R . O	29.7	21 1	32.3	33.4	34.2	35.0	35.7	36.4	36.9	37.4	37.9	38.4	38.8	37.2	39.0	27.7	40.2	40.5	40.0
42.0 42.5	24.3	28.5	30.3	31.8	32.7	34.1	35.0	35.8	36.5	37.2	37.8	38.3	38.8	39.3	39.7	40.1	40.5	40.0	41.2	41.0	41.5
43.0	26.5	28.8	30.6	32.1	33.4	34.4	35.4	36.2	36.9	37.6	38.2	38.7	39.2	39.7	40.1	40.5	40.9	41.3	41.0	42.0	42.8
43.5 44.0	27.1	29.4	31.2	32.B	34.1	35.1	36.1	36.9	37.7	38.4	39.0	39.6	40.1	40.6	41.0	41.4	41.8	42.2	42.0	42.9	43.2
44.5 45.0	27.3	29.7	31.6	33.1	34.4	35,5	36.5	37.3	38.1	38.8	39.4	40.0	40.5	41.0	41.9	41.9	42.3	42.7	43.1	43.4	44.2
45.5	27 A	30.2	32.2	33 7	35.1 35.4	36.2	37.2	38.1	38.9	39.6	40.2	40.8	41.4	41.9	42.4	42.8	43.2	43.0	44.0	44.4	44.7
46.0 46.5	28.7	30.8	32.8	34.4	35.8	36.9	37.9	38.9	39.7	40.4	41.1	41.7	42.2	42.8	43.2	43.7	44.1	44.0	44.9	45.3	40.7
47.0 47.5	28.6	31.1	33.1	34.7	36.1	37.3	38.3	39.2	40.1	40.8	41.5	42.1	42.7	43.2	44.1	44.2	44.6	45.5	45.9	46.3	46.6
48.0	20 () 31.A	. 22.7	353	36.B	38.0	39.0	40.0	40.8	41.6	42.3	42.9	43.5	44.1	. 44.0	45.1	45.5	47.7	40.4	40.7	47.1 47.6
48.5 4940	20 '	1 22.2	34.3	36.0	37.4	38.7	39.8	40.7	41.6	42.4	43.1	43.8	44.4	44.9	45.5	46.0	46.4	40.7	47.3	4/.	48.1
49.5 50.0	29.5	1 22.4	34.5	36.3	. 37.A	39.0	40.1	41.1	42.0	42.8	43.5	44.2	44.8	45.4	45.9	40.4	46.9	47.3	47.6	48.2	48.6
20.0	٠.٠٠		54.0	20.0	2011		,,,,					, •									

STUMP DOB	0.0	0.2	0.4	0.6	0.8	1.0	1.2	5'	TUMP	HEIGH'	T (IN	FEET 2.2			2,8	3.0	3.2	3.4	3.6	3.8	4.0
5.0	3.7	3.9	4.1	4.2	4.3	4.4	4.5	4.5	4.6	4.7	4.7	4.7	4.8	4.8	4.8	4.9	4.9	4.9	4.9	4.9	5.0
5.5 6.0	4.1	4.3	4.5 4.9	4.6 5.1	4.7 5.2	4.8 5.3	4.9 5.4	5.0 5.5	5.1 5.5	5.1 5.6	5.2 5.6	5.2 5.7	5.3 5.7	5,3 5,8	5.3 5.8	5.3 5.8	5.4 5.9	5.4 5.9	5.4 5.9	5.4 5.9	5.5 6.0
6.5 7.0	4.9 5.2	5.1 5.5	5.3 5.7	5.5 5.9	5.6 6.1	5.7 6.2	5.8 6.3	5.9 6.4	6.0	6.1	6.1	6.2	6.2	6.3	6.8	6.8	6.4	6.4	6.4	6.4	6.5 7.0
7.5	5.6	5.9	6.1	6.3	6.5	6.6	6.7	6.8	6.9	7.0	7.1	7.1	7.2	7.2	7.3	7.3	7.3	7.4	7.4	7.4	-7.4
8.0 8.5	6.0 6.4	6.7	7.0	6.8 7.2	6.9 7.4	7.1 7.5	7.2 7.6	7.3 7.8	7.4 7.8	7.5 7.9	7.5 8.0	7.6 8.1	7.7 8.1	7.7 8.2	7.7 8.2	7.8 8.3	7.8 8.3	7.9 8.4	7.9 8.4	7.9 8.4	7.9 8.4
9.0 9.5	6.8 7.1	7.1 7.5	7.4 7.8	7.6	7.8 8.2	8.0	8.1 8.5	8.2	8.3	8.4	9.0	8.6 9.0	8.6 9.1	8.7 9.2	8.7 9.2	8.8	8.8 9.3	8.8	8.9 9.4	8.9 9.4	8.9 9.4
10.0	7.5	7.9	8.2	8.5	8.7	8.9	9.0	9.1	9.2	9.3	9.4	9.5	9.6	9.6	9.7	9.7	9.8	9.8	9.9	9.9	9.9
11.0	8.3	8.3	9.1	9.3	9.1	9.3					10.4	10,5	10.5	10.6	10.7	10.7	10.8	10.3	10.9	10.9	10.9
11.5 12.0	8.7 9.1	9.1 9.5	9.5 9.9															11.3			
12.5 13.0	9.4 9.8	9.9	10.3	10.6	10.9	11.1	11.3	11.4	11.6	11.7	11.8	11.9	12.0	12.1	12.1	12.2	12.2	12.3	12.3	12.4	12.4
13.5	10.2	10.7	11.2	11.5	11.8	12.0	12.2	12.4	12.5	12.6	12.8	12.9	13.0	13.0	13.1	13.2	13.2	13.3	13.3	13.4	13.4
14.0 14.5	11.0	11.5	12.0	12.4	12.2	12.9	13.1	13.3	13.5	13.1	13.7	13.3	13.4	14.0	14.1	13.7	13.7	13.8 14.3	13.8	13.9	13.9
15.0 15.5	11.4	12.0	12.4	12.8	13.1	13.4	13.6	13.8	13.9	14.1	14.2	14.3	14.4	14.5	14.6	14.6	14.7	14.8	14.8	14.9	14.9
16.0 16.5	12.1	12.8	13.3	13.7	14.0	14.3	14.5	14.7	14.9	15.0	15.2	15.3	15.4	15.5	15.6	15.6	15.7	15.8	15.8	15.9	15.9
17.0	12.9	13.6	14.1	14.5	14.9	15.2	15.4	15.6	15.8	16.0	16.1	16.2	16.3	16.4	16.5	16.6	16.7	16.3 16.8	16.8	16.9	16.9
17.5 18.0	13.3	14.0	14.5	15.0	15.3	15.6	15.9	16.1	16.3	16.4	16.6	16.7	16.8	16.9	17.0	17.1	17.2	17.2 17.7	17.3	17.4	17.4
18.5 19.0	14.1	14.8	15.4	15.8	16.2	16.5	16.8	17.0	17.2	17.4	17.6	17.7	17.8	17.9	100	18.1	18.2	18.2	18.3	18.4	18.4
19.5	14.9	15.6	16.2	16.7	17.1	17.4	17.7	18.0	18.2	18.4	18.5	18.7	18.8	18.9	19.0	19.1	19.2	18.7 19.2	19.3	19.3	19.4
20.0 20.5																		19.7			
21.0 21.5																		20.7			
22.0	16.9	17.7	18.4	18.9	19.4	19.7	20.0	20.3	20.5	20.8	20.9	21.1	21.2	21.3	21.5	21.5	21.6	21.7	21.8	21.8	21.9
22.5 23.0	17.7	18.6	19.2	19.8	20.3	20.7	21.0	21.3	21.5	21.7	21.9	22.1	22.2	22.3	22.4	22.5	22.6	22.2	22.8	22.8	22.9
23.5 24.0	18.1 18.5	19.0	19.7	20.3	20.7	21.1	21.4	21.7	22.0	22.2	22.4	22.5	22.7	22.8	22.9	23.0	23.1	23.2	23.3	23.3	23.4
24.5	18.9	19.8	20.5	21.1	21.6	22.0	22.4	22.7	22.9	23.2	23.3	23.5	23.7	23.8	23.9	24.0	24.1	24.2	24.3	24.3	24.4
25.0 25.5																		24.7 25.2			24.9
26.0 26.5																		25.7 26.2			25.9
27.0 27.5	20.9	21.9	22.7	23.4	23.9	24.3	24.7	25.1	25.3	25.6	25.8	26.0	26.1	26.3	26.4	26.5	26.6	26.7	26.8	26.8	26.9
28.0	21.7	22.8	23.6	24.3	24.8	25.3	25.7	26.0	26.3	26.5	26.8	26.9	27.1	27.3	27.4	27.5	27.6	27.2 27.7	27.8	27.8	27.9
28.5 29.0	22.1	23.2	24.0	24.7	25.7	25.7 26.2	26.1	26.5	26.8	27.0	27.2	27.4	27.6	27.7	27.9	28.0	28.1	28.2 28.7	28.3	28.3	28.4
29.5 30.0	22.9	24.0	24.9	25.6	26.2	26.7	27.1	27.4	27.7	28.0	28.2	28.4	28.6	28.7	28.9	29.0	29.1	29.2	29.3	29.3	29.4
30.5	23.7	24.9	25.8	26.5	27.1	27.6	28.0	28.4	28.7	29.0	29.2	29.4	29.6	29.7	29.9	30.0	30.1	30.2	30.3	30.3	30.4
31.0 31.5	24.5	25.7	26.7	27.4	28.0	28,5	29.0	29.3	29.7	29.9	30.2	30,4	30.6	30.7	30.9	31.0	31.1	30.7 31.2	31.3	31.3	30.9
32.0 32.5	24.9 25.4	26.2	27.1 27.6	27.9	28.5	29.0	29.5	29.8	30.1	30.4	30.7	30.9	31.1	31.2	31.4	31.5	31.6	31.7 32.2	31.8	31.8	31.9
33.0 33.5	25.8	27.0	28.0	28.8	29.4	30.0	30.4	30.8	31.1	31.4	31.6	31.9	32.0	32.2	32.4	32.5	32.6	32.7	32.8	32.8	32.9
34.0	26.0	27.9	28.9	29.7	30.3	30.9	31.4	31.8	32.1	32.4	32.6	32.8	33.0	33.2	33.3	33.5	33.6	33.2 33.7	33.8	33.8	33.9
34.5 35.0	27.0	28.3	29.3	30.1	30.8	31.4	31.8	32.2	32.6	32.9	33.1 33.6	33.3	33.5	33.7	33.8	34.0	34.1	34.2 34.7	34.8	34.3	34.4
35.5 36.0	27.8	29.2	30.2	31.1	31.7	32.3	32.8	33.2	33.5	33.8	34.1	34.3	34.5	34.7	34.8	35.0	35.1	35.2 35.7	35.3	35.3	35.4
36.5 37.0	28.7	30.0	31.1	32.0	32.7	33,3	33.7	34.2	34.5	34.8	35.1	35.3	35.5	35.7	35.8	36.0	36.1	36.2	36.3	36.3	36.4
37.5	29.5	30.9	32.0	32.9	33.6	34.2	34.7	35.1	35.5	35.8	36.1	36,3	36.5	36.7	36.8	37.0	37.1	36.7 37.2	37.3	37.3	37.4
38.0 38.5	29.9 30.3	31.3	32.5	33.3 33.8	34.1	34.7 35.2	35.2 35.7	35.6 36.1	36.0 36.5	36.3 36.8	36.6 37.1	36.8	37.0 37.5	37.2 37.7	37.3 37.8	37.5 38.0	37.6 38.1	37.7 38.2	37.8	37.8	37.9
39.0 39.5	30.7	32.2	33.4	34.3	35.0	35.6	36.1	36.6	37.0	37.3	37.6	37.8	38.0	38.2	38.3	38.5	38.6	38.7	38.8	38.8	38.9
40.0	31.6	33.1	34.3	35.2	35.9	36,6	37.1	37.6	37.9	38.3	38.6	38.8	39.0	39.2	39.3	39.5	39.6	39.7	39.8	39.8	39.9
40.5 41.0	32.4	34.0	35.2	36.1	36.9	37.5	38.1	38.5	38.9	39.3	39.5	39.8	40.0	40.2	40.4	40.5	40.6	40.2 40.7	40.8	40.9	40.9
41.5 42.0	32.8	34.4	35.6	36.6	37.4	38.0	38.6	39.0	39.4	39.8	40.0	40.3	40.5	40.7	40.9	41.0	41.1	41.2 41.7	41.3	41.4	41.4
42.5	33.7	35.3	36.5	37.5	38.3	39.0	39.5	40.0	40.4	40.7	41.0	41.3	41.5	41.7	41.9	42.0	42.1	42.2	42.3	42.4	42.4
43.0 43.5	34.5	36.2	37.4	38.4	39.3	39.9	40.5	41.0	41.4	41.7	42.0	42.3	42.5	42.7	42.9	43.0	43.1	42.7 43.2	43.3	43.4	43.4
44.0 44.5	35.0 35.4	36.6 37.0	37.9 38.3	38.9	39.7	40.4	41.0	41.5	41.9	42.2	42.5	42.8	43.0	43.2	43.4	43.5	43.6	43.7 44.2	43.8	43.9	43.9
45.0 45.5	35.8	37.5	38.8	39.8	40.7	41.4	42.0	42.5	42.9	43.2	43.5	43.8	44.0	44.2	44.4	44.5	44.6	44.7	44.8	44.9	44.9
46.0	36.7	38.4	39.7	40.8	41.6	42.3	42.9	43.4	43.9	44.2	44.5	44.8	45.0	45.2	45.4	45.5	45.6	45.2 45.7	45.8	45.9	45.9
46.5 47.0	37.5	39.3	40.6	41.7	42.6	43.3	43.9	44.4	44.9	45.2	45.5	45.8	46.0	46.2	46.4	46.5	46.6	46.2 46.7	46.8	46.9	46.9
47.5 48.0	37.9	39.7	41.1	42.2	43.1	43.8	44.4	44.9	45.3	45.7	46.0	46.3	46.5	46.7	46.9	47.0	47.2	47.2 47.8	47.3	47.4	47.4
48.5	38.8	40.6	42.0	43.1	44.0	44.8	45.4	45.9	46.3	46.7	47.0	47.3	47.5	47.7	47.9	48.0	48.2	48.3	48.3	48.4	48.4
49.5	39.7	41.5	42.9	44.1	45.0	45,7	46.4	46.9	47.3	47.7	48.0	48.3	48.5	48.7	48.9	49.1	49.2	48.8 49.3	49.3	49.4	49.4
50.0	40.1	42.0	43.4	44.5	45,5	46.2	46.9	47.4	47.8	48.2	48.5	48.8	49.1	49.3	49.4	49.6	49.7	49.8	49.8	49.9	50.0

STUMP DOB	0.0	0.2	0.4	0.6	0.8	1.0				EIGHT 1.8		FEET) 2.2	2.4	2,6	2.8	3.0	3.2	3,4	3.6	3.8	4.0
5.0	3.3	3.5	3.7	3.8	3.9	4.1 4.5	4.1	4.2 4.7	4.3	4.4	4.4	4.5 5.0	4.6 5.0	4.6 5.1	4.7 5.1	4.7 5.2	4.8 5.2	4.8 5.3	4.8 5.3	4.9 5.4	4.9 5.4
5.5 6.0	3.7 4.0	3.9 4.2	4.1 4.4	4.2 4.6	4.3	4.9	5.0	5.1	5.2	5.3	5.3	5.4	5.5	5.5	5.6	5.7	5.7	5.8	5.8	5.9	5.9
6.5 7.0	4.3	4.6 4.9	4.8 5.2	5.0 5.4	5.1 5.5	5.3 5.7	5.4 5.8	5.5 5.9	5.6 6.0	5.7 6.1	5.8 6.2	5.9 6.3	5.9 6.4	6.0 6.5	6.1	6.6	6.2	6.2	6.3	6.8	6.4 6.9
7.5	5.0	5.3	5.5	5.7	5.9	6.1	6.2	6 - 4	6.5	6.6	6.7	6.8	6.9 7.3	6.9 7.4	7.0 7.5	7.1 7.6	7.1 7.6	7.2 7.7	7.3 7.8	7.3 7.8	7.4 7.9
8.0 8.5	5.3 5.7	5.7 6.0	5.9 6.3	6.1 6.5	6.3 6.7	6.5	6.6 7.1	6 • 8 7 • 2	6.9 7.3	7.0 7.5	7.1 7.6	7.2 7.7	7.8	7.9	7.9	8.0	8.1	8.2	8.2	8,3	8.4
9.0	6.0	6.4	6.7 7.0	6.9 7.3	7.1 7.5	7.3 7.7	7.5 7.9	7.6 8.1	7.8 8.2	7.9 8.3	8.0	8.1	8.2	8.3 8.8	8.4 8.9	8.5 9.0	8.6 9.1	8.7 9.1	8.7 9.2	8.8 9.3	8.9 9.3
9.5 10.0	6.3 6.7	6.7 7.1	7.4	7.7	7.9	8.1	8.3	8.5	8.6	8.8	8.9	9.0	9.1	9.3	9.4	9.4	9.5	9.6	9.7	9.8	9.8
10.5 11.0	7.0 7.4	7.4 7.8	7.8 8.2	8.1 8.5	8.3 8.7	8.5 9.0	8.7 9.2	8.9 9.3	9.1 9.5	9.2 9.7	9.4 9.8	9.5 9.9	9.6	9.7 10.2	9.8	10.4	10.0	10.6	10.7	10.7	10.8
11.5	7.7	8.2	8.5	8.8	9.1	9.4	9.6	9.8	10.0	10.1	10.3	10.4	10.5	10.6	10.8	10.9	11.0	11.1	11.1	11.2	11.3
12.0 12.5	8.0 8.4	8.5 8.9	8.9 9.3	9.2 9.6	9.5 9.9	10.2	10.4	10-6	10.8	11.0	11.2	11.3	11.4	11.6	11.7	11.8	11.9	12.0	12.1	12.2	12.3
13.0	8.7 9.1	9.2	9.7	10.0	10 2	10.6	10.8	11.1	11.3	11.4	11.6	11.8	11.9	12.0	12.Z	12.3	12.4	12.5	12.6	12.7	12.8
13.5 14.0	0 4	100	10.4	1 A A	11.1	11.4	11.7	11.9	12.1	12.3	12.5	12.7	12.8	13.0	13.1	13.2	13.4	13.3	13.0	13.1	10.0
14.5 15.0	10 1	10 7	11 2	11 A	11.9	12.2	12.5	12.8	13.0	12.8	13.4	13.6	13.8	13.9	14.1	14.2	14.5	14.4	14.0	14.1	14.0
15.5	10 /	11 0	11 5	12 0	12 2	127	12.9	12.2	12.4	13.7	13.9	14.0	14.2	14.4	14.5	14.7	14.5	14.7	12.0	1201	10.0
16.0 16.5	111	11.8	12.3	127	13.1	13.5	13.8	14.1	14.3	14.5	14.8	15.0	15.1	15.3	10.0	15.6	15.8	10.7	10.0	10.1	10.2
17.0	115	13 1	127	12 1	12.5	12 Q	14.2	14.5	14.8	15.0 15.4	15.2	15.4	15.6	15.8	15.47	10.1	10.2	10.4	10.0	10.0	10.7
17.5 18.0	122	12.0	12 4	12 9	14.4	14.7	15.1	15.4	15.6	15.9	16.1	16.3	16.5	16.7	16.4	17.0	17.6	11.3	1/40	1/.0	11.
18.5 19.0	12 8	12 4	14 2	14 7	15.2	15.6	15.9	16.2	16.5	16.3	17.0	17.2	17.4	1 / . 0	1/.0	1.5.0	18.2	10.5	10.4	10.0	10.1
19.5	122	120	14.6	15 1	15.6	16-0	16.3	16.7	17.0	17.2	17.5	17.7	17.9	18.1	18.3	16.5	18.0	10.0	10.7	17.1	17.6
20.0 20.5	12 9	14 7	15 3	15 0	16.4	16.8	17.2	17.5	17.8	17.7 18.1	18.4	18.6	18.8	19.0	19.2	19.4	19.6	19.8	19.9	20.0	20.2
21.0	16.2	15 0	15 7	16 2	16.8	17.2	17.6	18.0	18.3	18.6	18.8	19.1	19.3	19.5	19.7	19.9	20.1	20.2	20.4	20.5	20.7
21.5	14 9	15.8	16.5	17 1	17.6	18.1	18.5	18.8	19.2	19.5	19.7	20.0	20.2	20.4	20.7	20.8	41.0	41.4	61.4	61.5	21.1
22.5	15.3	16.1	16.9	17.5	18.0	18.5	18.9	19.3	19.6	19.9	20.2	20.4	20.7	20.9	21.1	21.3	21.5	21.7	21.9	22.0	44.4
23.0 23.5	16.0	14.9	17.6	18 3	18.8	19.3	19.7	20.1	20.5	20.8	21.1	21.4	21.6	21.9	22.1	22.3	22.5	22.	22.8	23.0	23.1
24.0	16.3	17.2	18.0	18.7	19.2	19.7	20.2	20.6	20.9	21.2	21.5	21.8	22.1	22.8	22.5	23.2	23.4	23.6	23.8	24.0	24.1
24.5 25.0	17 0	3 R . A	18.8	19 5	20.0	20.6	21.0	21.4	21.8	22.1	22.5	22.7	23.0	23.3	23.5	23.1	23.9	24.1	24.0	24.5	24.0
25.5 26.0	17 7	18.7	19.6	20.3	20.9	21.4	21.9	22.3	22.7	22.6	23.4	23.7	23.9	24.2	24.4	24./	24.9	20.1	25.3	20.4	20.0
26.5	19 1	19.1	199	20 7	21.2	21.8	22.3	22.7	23.1	23.5	23.8	24.1	24.4	24./	24.9	25.1	25.4	40.0	20.0	40.9	20.I
27.0 27.5	108	10 8	20 7	21 5	22 1	22 7	23.2	23.6	24.0	23.9	24.7	25.0	25.3	25.0	25.9	20.1	20.3	20.7	20.7	20.9	21.1
28.0	10 1	20 2	21 1	21 0	22.5	23.1	22.6	24.0	24.5	24.8 25.3	25.2	25.5	25.8	26.1	26.3	20.0	26.8	27.0	21.2	21.4	21.0
28.5 29.0	10 2	20.9	21 9	22 7	22.3	23.9	24.5	24.9	25.4	25.7	26.1	26.4	26.7	27.0	27.3	21.5	27.8	28.0	20.2	20.4	20.0
29.5 30.0	20 6	21 7	22 6	22 5	24 2	24.R	25.3	25.8	26.2	26.2 26.6	27.0	27.4	27.7	28.0	28.2	28.5	28./	27.0	27.2	27.4	47.0
30.5	20 9	22.1	23.0	22 9	24.6	25.2	25.7	26.2	26.7	27.1	27.5	27.8	28.1	28.4	28.7	29.0	29.2	47.4	27.1	47.7	20 • T
31.0 31.5	21 6	22. R	22.8	24.7	25.4	26.0	26.6	27.1	27.6	27.5 28.0	28.4	28.7	29.1	29.4	29.7	29.9	30.2	30.4	30.0	30.8	31.0
32.0	23 0	22.2	24.2	25 1	25.8	26.5	27.0	27.6	28.0	28.5 28.9	28.8	29.2	29.5	29.9	30.1	30.4	30.7	30.9	31.1	31 · 4	31.0
32.5 33.0	22 7	22 0	25 0	25 9	26.6	27.3	27.9	28.4	28.9	29.4	29.8	30.1	30.5	30.5	31.1	31.4	31.0	31.7	32.1	26.3	34.3
33.5	22 2	2/. 2	25 /	24 2	27 0	27 7	2 B 2	28 0	20 4	29.8	30.2	30.6	30.9	31.3	31.6	31.8	32.1	32.4	32.0	32.8	33.0
34.0 34.5	22.7	25.1	26.2	27 1	27.9	28.6	29.2	29.8	30.3	30.7	31.1	31.5	31.9	32.2	32.0	32.8	33.1	22.3	22.0	22.0	24.U
35.0 35.5	24.5	25.8	26.9	27 9	28.7	29.4	30-1	30.6	31.2	31.2 31.6	32.1	32.5	32.8	33.2	33.5	33.8	34.0	34.3	34.0	34.6	33.0
36.0	2 / A	26 2	27 2	28 2	20 1	20 0	30.5	31.1	31.6	32.1 32.5	32.5	32.9	33.3	33.0	34.0	34.3	34.5	34.0	33.0	22.2	30.0
36.5 37.0	25 5	26.9	28.1	29.1	30.0	30.7	31.4	32.0	32.5	33.0	33.4	33.8	34.2	34.0	34.9	33.2	35.5	32.0	30.0	20.3	30.3
37.5	25.9	27.3	28.5	29.5	30.4	31.1	31.8	32.4	32.9	33.4	33.9	34.3	34.7	35.1 35.5	35.4	35.7	36.0	36.7	37.0	37.2	37.5
38.0 38.5	24 4	2 R . 1	29.3	20 2	31.2	32.0	32.7	33.3	33.8	34.4	34.8	35.2	35.0	30.0	30.3	30.1	3/.0	21.6	91.0	21.1	20.0
39.0 39.5	27 2	28.8	30.1	21 1	32.0	32.8	22.5	34.2	34.7	34.8 35.3	35.7	36.2	36.6	36.9	37.3	3/.0	3/.9	30.4	30.0	30.1	37.0
40.0	27 7	20 2	30 5	21 5	22 5	22 2	24.0	34.6	35.2	35.7	36.2	36.6	37.0	37.4	37.8	38.1	38.4	30.1	37.0	37.6	37.7
40.5 41.0	22 4	30.0	21.2	22 4	22.2	34.1	24.9	35.5	36.1	36.2	37.1	37.6	38.0	38.4	38.7	39.1	39.4	37.1	37.7	40.2	40.4
41.5	20 4	20 4	. 21 7	22 A	22.7	34.6	25.3	36.0	36.5	37.1	37.6	38.0	38.5	38.8	39.2	39.5	39.9	40.2	40.4	40.7	40.9
42.0 42.5	20 4	21.1	32 5	22 6	34.6	35.4	36.2	36.8	37.4	38.0	38.5	39.0	39.4	39.8	40.Z	40.5	40.8	41.1	41.4	41.7	41.7
43.0 43.5	20 2	216	222	34 4	35 4	26.2	27.0	27.7	38.4	38.9	39.4	39.9	40.3	40.7	41.1	41.5	41.8	42.1	42.4	46.1	42.4
44.0	30 6	. 22 2	ו גגו	' 34 R	35 A	36 7	37.5	38.2	38.8	39.4	39.9	40.4	40.8	41.2	41.0	42.0	42.3	42.0	42.7	43.2	43.4
44.5 45.0	21 3	1 22 6	1 74 5	25 6	36.7	37.6	38.4	39.1	39.7	40.3	40.8	41.3	41.8	42.2	42.6	42.9	43.3	43.0	43.9	44.1	43.9
45.5	2	7 22.4	34.9	36 1	37.1	38.0	38.8	39.5	40.2	40.7	41.3	41.8	42.2	42.6	43.0	43.4	43.7	44.1	44.4	44.0	44.7
46.0 46.5	22 /	24 2	25 7	, 34 6	37.9	38.9	19.7	40.4	41.1	41.7	42.2	42.7	43.2	43.0	944.0) 44.4	. 44.1	42.0	, 40.9	47.0	45.4
47.0	22 5	34.6	36.1	37 3	38.4	39.7	40.1	40.9	41.5	42.1	42.7	43.2	43.6	9 44.1	. 44.5) 44.5	45.2	40.0	47.0	40.1	46.4
47.5 48.0	22 1	5 25 /	36 9	28 1	39.2	40.2	41.0	41.8	42.4	43.0	43.6	44.1	44.6	45.0	45.4	45.8	46.2	40.	40.0	4/•1	. 4/.4
48.5 49.0	33.9	35.7	7 37.3 1 37.7	38.5 7 38 9	39.6	40.6	41.4	42.2	42.9	43.5	44.5	. 44.6 . 45.1	45.5	45.5) 45.9) 46.4	46.8	3 40.7 3 47.1	47.5	47.8	48.1	48.4
49.5	34 /	4 24 1	1 ac 7	20 4	40.	41.	42.7	43.1	43.8	1 44.4	45.0	45.5	46.0	9 40.3	40.	41.2	3 4 / . 0	40.0	40.5	40.0	40.7
50.0	35.0	36.9	38.5	39.8	40.9	41.9	42.8	43.5	44.2	44.9	45.5	40.0	, 40.	40.1	* * / • 4	. 4/.6	95.1	0.3	, 40.0	77.	49.4

STUMP DD8	0.0	0.2	0.4	0.6	0.8	1.0	1.2	S 1.4	TUMP 1.6	HEIGH 1.8	T (IN	FEET)	2.6		3.0	3.2	3.4	3,6	3.8	4.0
5.0 5.5	3.8 4.1	3.9 4.3	4.0 4.4	4.1 4.5	4.2	4.3	4.3	4.4	4.5	4.5	4.6	4.6	4.7	4.7	4.7	4.8	4.8	4.8	4.9	4.9	4.9
6.0	4.5	4.6	4.8	4.9	4.6 5.0	4.7 5.1	5.2	4.8 5.3	4.9 5.3	5.0 5.4	5.0 5.5	5.1 5.5	5.1 5.6	5.2 5.6	5.2 5.7	5.2 5.7	5.3 5.8	5.3 5.8	5.4 5.8	5.4 5.9	5.4 5.9
6.5 7.0	4.8 5.2	5.0 5.4	5.2 5.5	5.3 5.7	5.4 5.8	5.5 5.9	5,6 6,0	5.7 6.1	5.8 6.2	5,8 6.3	5.9 6.3	6.0	6.0	6.1	6.1	6.2	6.2 6.7	6.8	6.8	6.4	6.4
7.5	5.5	5.7	5.9	6.1	6.2	6.3	6.4	6.5	6.6	6.7	6.8	6,9	6.9	7.0	7.1	7.1	7.2	7.2	7.3	7.3	.7.4
8.0 8.5	5.9 6.2	6.5	6.3	6.8	7.0	6.7 7.1	7.2	6.9 7.4	7.0 7.5	7.1 7.6	7.2 7.7	7.3 7.7	7.4 7.8	7.4 7.9	7.5 8.0	7.6 8.0	7.6 8.1	7.7 8.2	7.8 8.2	7.8 8.3	7.9 8.4
9.0 9.5	6.6	6 • 8 7 • 2	7.0 7.4	7.2 7.6	7.4 7.8	7.5	7.7 8.1	7.8	7.9	8.0	8.1	8.2	8.3	8.4	8.4	8.5	8.6	8.7	8.7	8.8	8.9
10.0	7.2	7.5	7.8	8.0	8.2	8.3	8.5	8.2	8.3 8.7	8.4	8.5 9.0	8.6 9.1	8.7 9.2	8.8 9.3	8.9 9.4	9.0 9.4	9.1 9.5	9.1 9.6	9.2 9.7	9.3 9.8	9.3 9.8
10.5 11.0	7.6 7.9	7.9 8.2	8.1	8.3	8.5 8.9	8.7 9.1	8.9 9.3	9.0 9.4	9.1 9.6	9.3 9.7	9.4 9.8	9.5	9.6	9.7	9.8	9.9 10.4		10.1			
11.5 12.0	8.2 8.5	8.6 8.9	8.8 9.2	9.1 9.4	9.3 9.7	9.5	9.7	9.8	10.0	10.1	10.3	10.4	10.5	10.6	10.7	10.8	10.9	11.0	11.1	11.2	11.3
12.5	8.9	9.2	9.5	9.8	10.0	9.9	10.5	10.6	10.8	11.0	11.1	11.2	11.4	11.5	11.6	11.3	11.9	12.0	12.1	12.2	12.3
13.0 13.5	9.2 9.5	9.6	9.9	10.2	10.4	10.6	10.8	11.0	11.2	11.4	11.5	11.7	11.8	11.9	12.1	12.2 12.7	12.3	12.4	12.5	12.6	12.8
14.0 14.5	9.8	10.2	10.6	10.9	11.1	11,4	11.6	11.8	12.0	12.2	12.4	12.5	12.7	12.8	13.0	13.1	13.2	13.4	13.5	13.6	13.7
15.0	10.4	10.9	11.2	11.6	11.9	12.1	12.4	12.6	12.8	13.0	13.2	13,4	13.5	13.7	13.9	13.6	14.2	14.3	14.4	14.6	14.7
15.5 16.0	10.7	11.2	11.6	11.9	12.2	12.5	12.8	13.0	13.2	13.4	13.6	13.8	14.0	14.1	14.3	14.5	14.6	14.8	14.9	15.0	15.2
16.5	11.3	11.8	12.2	12.6	12.9	13,2	13.5	13.8	14.0	14.2	14.4	14.6	14.8	15.0	15.2	15.4	15.5	15.7	15.8	16.0	16.1
17.0 17.5	11.9	12.4	12.9	13.3	13.6	14.0	14.3	14.5	14.8	15.0	15.3	15.5	15.7	15.9	16.1	15.8	16.4	16.6	16.8	17.0	17.1
18.0 18.5	12.2	12.7	13.2	13.6	14.0	14.3	14.6	14.9	15.2	15.4	15.7	15.9	16.1	16.3	14.5	16.7	16.9	17.1	17.3	17.4	17.6
19.0	12.8	13.4	13.9	14.3	14.7	15.0	15.4	15.7	16.0	16.2	16.5	16.7	17.0	17.2	17.4	17.6	17.8	18.0	18.2	18.4	18.6
19.5 20.0	13.0	13.6	14.5	14.6	15.4	15.4	15.7	16.4	16.3	16.6	16.9	17.1	17.4	17.6	17.8	18.1 18.5	18.3	18.5	18.7	18.9	19.0
20.5	13.6	14.2	14.8	15.3	15.7	16.1	16.4	16.8	17.1	17.4	17.7	18.0	18.2	18.5	18.7	18.9	19.2	19.4	19.6	19.8	20.0
21.5	14.1	14.8	15.4	15.9	16.4	16.8	17.2	17.5	17.9	18.2	18.5	18.8	19.0	19.3	19.6	19.8	20.1	20.3	20.5	20.8	21.0
22.0 22.5	14.7	15.4	16.0	16.5	17.0	17.5	17.9	18.2	18.6	18.9	19.3	19.6	19.9	20.2	20.4	20.3	21.0	21.2	21.5	21.7	21.9
23.0 23.5	14.9	15.7	16.3	16.8	17.3	17.8	18.2	18,6	19.0	19.3	19.7	20.0	20.3	20.6	20.9	21.1	21.4	21.7	21.9	22.2	22.4
24.0	15.4	16.2	16.9	17.5	18.0	18.5	18.9	19.3	19.7	20.1	20.4	20.8	21.1	21.4	21.7	21.6	22.3	22.6	22.8	23.1	23.4
24.5 25.0	15.7	16.5	17.2	17.8	18.3	18.8	19.2	19.7	20.1	20.5	20.8	21.2	21.5	21.8	22.1	22.4	22.7	23.0	23.3	23.6	23.9
25.5	16.2	17.0	17.7	18.4	18.9	19,4	19.9	20.4	20.8	21.2	21.6	22.0	22.3	22.7	23.0	23.3	23.6	23.9	24.2	24.5	24.8
26.0 26.5	16.7	17.5	18.3	18.9	19.5	20.1	20.6	21.1	21.5	21.9	22.4	22.7	23.1	23.5	23.8	23.7	24.5	24.8	25.1	25.5	25.8
27.0 27.5	16.9	17.8	18.6	19.2	19.8	20.4	20.9	21.4	21.9	22.3	22.7	23.1	23.5	23.9	24.3	24.6	24.9	25.3	25.6	25.9	26.2
28.0	17.4	18.3	19.1	19.8	20.4	21.0	21.6	22.1	22.6	23.0	23.5	23.9	24.3	24.7	25.1	25.5	25.8	26.2	26.5	26.9	27.2
28.5 29.0	17.8	18.8	19.4	20.1	20.7	21.3	21.9	22.8	22.9	23.4	23.9	24.7	24.7	25.1	25.5	25.9 26.3	26.3	26.6	27.0	27.8	
29.5 30.0	18.0	19.0	19.9	20.6	21.3	22.0	22.6	23.1	23.6	24.1	24.6	25.1	25.5	25.9	26.3	26.7 27.2	27.1	27.5	27.9	28.3	28.6
30.5	18.5	19.5	20.4	21.2	21.9	22.6	23.2	23.8	24.3	24.8	25.3	25.8	26.3	26.7	27.2	27.6	28.0	28.4	28.8	29.2	29.6
31.0 31.5	18.7	20.0	20.7	21.7	22.2	22.9	23.5	24.4	24.7	25.2	25.7	26.2	26.7	27.1	27.6	28.0 28.4	28.4	28.9	29.3	29.7	30.0
32.0 32.5	19.1	20.2	21.2	22.0	22.8	23,5	24.1	24.7	25.3	25.9	26.4	26.9	27.4	27.9	28.4	28.9	29.3	29.7	30.2	30.6	31.0
33.0	19.5	20.7	21.6	22.5	23.3	24.1	24.7	25.4	26.0	26.6	27.2	27.7	28.2	28.7	29.2	29.3 29.7	30.2	30.6	31.1	31.5	31.9
33.5 34.0	19.7	20.9	21.9	22.8	23.6	24.3	25.0	25.7	26.3	26.9	27.5	28.1	28.6	29.1	29.6	30.1	30.6	31.1	31.5	32.4	32.4
34.5 35.0	20.1	21.3	22.4	23.3	24.1	24.9	25,6	26.3	27.0	27.6	28.2	28.8	29.4	29.9	30.4	30.9	31.4	31.9	32.4	32.9	33.4
35.5	20.5	21.7	22.8	23.8	24.7	25.5	26.2	27.0	27.6	28.3	28.9	29.5	30.1	30.7	31.2	31.4	32.3	32.B	33.3	33.8	34.3
36.0 36.5	20.7	21.9	23.0	24.0	24.9	25.8	26.5	27.3	28.0	28.6	29.3	29.9	30.5	31.1	31.6	32.2 32.6	32.7	33.3	33.8	34.3	34.8
37.0 37.5	21.0	22.3	23.5	24.5	25.4	26.3	27.1	27.9	28.6	29.3	30.0	30.6	31.2	31.8	32.4	33.0	33.6	34.1	34.7	35.2	35.7
38.0	21.2	22.7	23.9	25.0	26.0	26.8	27.7	28.5	29.2	30.0	30.7	31.3	32.0	32.6	33.2	33.8	34.4	35.0	35.6	36.1	36.7
38.5 39.0	21.6	22.9	24.1	25.2	26.2	27.1	28.0	28.8	29.6	30.3	31.0	31.7	32.3	33.0	33.6	34.2 34.6	34.8	35.4	36.0	36.6	37.1
39.5	21.9	23.3	24.6	25.7	26.7	27.6	28.5	29.4	30.2	30 .9	31.7	32.4	33.1	33.8	34.4	35.1	35.7	36.3	36.9	37.5	38.1
40.0 40.5	22.2	23.7	25.0	26.1	27.2	28,2	29.1	30.0	30.8	31.6	32.4	33.1	33.8	34.5	35.2	35.5 35.9	36.5	37.2	37.8	38.4	39.0
41.0 41.5	22.4	23.9	25.2	26.3	27.4	28.4	29.4	30.2	31.1	31.9	32.7	33.4	34.2	34.9	35.6	36.3 36.7	36.9	37.6	38.2	38.9	39.5
42.0	22.7	24.2	25.6	26.8	27.9	28,9	29.9	30.8	31.7	32.5	33.4	34.1	34.9	35.6	36.4	37.1	37.8	38.4	39.1	39.8	40.4
42.5 43.0	23.0	24.6	25.9	27.2	28.4	29,4	30.4	31.4	32.3	33.2	34.0	34.8	35.6	36.4	37.1	37.5 37.9	38.6	39.3	40.0	40.7	41.4
43.5 44.0	23.1	24.7	26.1	27.4	28.6	29.7	30.7	31.7	32.6	33.5	34.3	35.2	36.0	36.8	37.5	38.3	39.0	39.7	40.4	41.1	41.8
44.5	23.4	25.0	26,5	27.8	29.0	30.2	31.2	32.2	33.2	34.1	35.0	35.8	36.7	37.5	38.3	39.1	39.8	40.6	41.3	42.0	42.8
45.0 45.5	23.5	25.2	26.7	28.0	29.2	30.4	31.5	32.5 32.8	33.5 33.7	34.4 34.7	35.3 35.6	36.2	37.0 37.4	37.9 38.2	38.7 39.0	39.5	40.2	41.0	41.8	42.5	43.2
46.0 46.5	23.8	25.5	27.0	28.4	29.7	30.9	32.0	33.0	34.0	35.0	35.9	36.8	37.7	38.6	39.4	40.2	41.1	41.8	42.6	43.4	44.1
47.0	24.0	25.8	27.4	28.8	30.1	31.3	32,5	33.6	34.6	35.6	36.6	37.5	38.4	39.3	40.2	41.0	41.9	42.7	43.5	44.3	45.1
47.5 48.0	24.1 24.3	26.1	27.7	29.0	30.5	31.5	32.7 33.0	33.8 34.1	34.9 35.2	35.9 36.2	36.9 37.2	37.8 38.2	38.8	39.7	40.6	41.4	42.3	43.1 43.5	43.9	44.7	45.5
48.5 49.0	24.4	26.2	27.9	29.4	30.7	32.0	33.2	34.3	35.4	36.5	37.5	38.5	39.5	40.4	41.3	42.2	43.1	44.0	44.8	45.6	46.5
49.5	24.6	26.5	28.2	29.7	31.1	32.4	33.7	34.9	36.0	37.1	38.1	39.1	40.1	41.1	42.1	43.0	43.9	44.8	45.7	46.5	47.4
50.0	24.7	20.6	28.3	29.9	31.3	32.7	33.9	35.1	36.3	37.4	38.4	39.5	40.5	41.5	42.4	43.4	44.3	45.2	46.1	47.0	47.9

STUMP	0.0	0.2	0.4	0.6	0.8	1.0	1.2	- STU	MP HE	IGHT 1.8	(IN F	EET) 2.2	2.4	2.6	2.8	3.0	 3.2	3.4	3.6	3.8	.0
DOB 5.0	3.3	3.5	3.7	3.8	4.0	4.1	4.2	4.3	4.3	4.4		4.5 5.0									5.4
5.5 6.0	3.6 3.9	3.9 4.2	4.0		4.8	4.9	5.0	5 - 1	5.2	5.3	5.4	5.4	5.5	5.6	5.6	5.7	5.7			-	5.9 5.4
6.5 7.0	4.3	4.5	4.8 5.1	5.0 5.4	5.5	5.7	5.8	6.0	5.6	6.2	5.8 6.3	6.3	6.4	6.5	6.6	6.6	6.7	6.7			5.9 7.4
7.5 8.0	4.9 5.2	5.2 5.6	5.5 5.9	5.7 6.1				6.8	6.9	7.0	7.2	6.8 7.2	7.3	7.4	7.5			7.7	7.8	7.8	7.9 8.4
8.5 9.0	5.6 5.9	5.9	6.2	6.5					7.4 7.8	7.5 7.9	7.6	7.7 8.2	7.8	7.9 8.3	8.4	8.5	8.6	8.7	8.7	8.8	8.9
9.5	6.2	6.6 7.0	7.0 7.3	7.3 7.6	7.5	7.7		8 • 1 8 • 5	8.2 8.7	8.4 8.8	8.5 8.9	8.6 9.1		9.3	9.4	9.0	9.1	9.6	9.7	9.8	9.8
10.0	6.8	7.3	7.7	8.0	8.3	8,5	8.7	8.9	9.1	9.2	9.4	9.5 10.0	9.6 10.1 1	າດົວ 1	9.8 10.3 1	9.9	0.5 1	0.6 1	0.7 1	0.8 1	0.8
11.0 11.5	7.2	8.0	8.4	8.8	9.1	9.3	9.6	9.8	9.9	10.1	0.3	10.4	10.5	10.7 1	10.8 1	1.3	11.4	11.5	1.6	1.7 1	1.8
12.0 12.5	7.8 8.1	8.3	9.1	9.5	9.8 1	0.1 1	0.4 1	0.6	10.8	11.0	11.1	11:3	11.9	12.0	12.2	2.3	2.4	2.5	2.6	2.7 1	2.8
13.0 13.5	8.4	9.0	9.9	10.3	10.6	0.9 1	1.2 1	1.4	11.7	11.7	12.0	12.4	12.8	13.0	13.1	3.2	13.3	3.5	3.6	3.7 1	3.8
14.0 14.5		10.0	10.6	11.0	11.4 1	1.7 1	2.0 1	2.3	12.0	12 2	12 4	13.5	13.7	13.9	14.0	14.2	14.3	14.4	4.5	4.7 1	4.8
15.0 15.5	10.0	10.7	11.3	11.8	12.2 1	.2.5 1	2.6	3.1	13.4	13.0	14.2	14.0	14 6	14.A	15.0	15.1	15.2	15.4	5.5	15.6 1	5.7
16.0 16.5	10.4	11.1	11.6	12.1	12.6 1 12.9 1	3.3 1	3.6	3.9	14.2	14.5	14.7	14.9	15.1	15.3	15.4	15.6	15.7	15.9	16.0	16.1 1	6.2
17.0 17.5	11.0	11.7	12.4	12.9	13.3	3.7	4 . 1	14.4		14.2	18 4	18 8	14.0	14.2	14-4	16.5	16.7	16.8	17.0	17.1	7.2
18.0 18.5	11.6	12.4	13.1	13.6	14.1	.4.5)	4.7	15.2	13.3	12.0	10.0	1012	14.0	17 1	17.3	17.5	17.6	17.8	17.9	18.1	8.2
19.0 19.5	12.2	13.1	13.8	14.4	14.9	15.5 1	13.1	10.0	10.3	10.0	1 7 3	1712	17 8	18.0	18.2	1A.4	18.6	18.7	18.9	19.0	19.2
20.0	12.9	13.8	14.5	15.1	15.6	16.1	10.2	10.7	17.2	11.5	10 2	18 6	18.7	18.9	19.1	19.3	19.5	19.7	19.9	20.0	20.2
20.5	13.5	14.4	15.2	15.8	16.4	10.9	17.3	11.1	10.0	10.7	10.1	10.4	10.4	10.8	20.1	20.3	20.5	20.6	20.8	21.0	21.1
21.5	14.1	15.1	15.9	16.6	17.2	1/1/	18.1	10.3	10.7	17.2	20.0	20.2	20.5	20.8	21.0	21.2	21.4	21.6	21.8	22.0	22.1
22.5	14.7	15.8	16.6	17.3	17.9	18.5	18.9	19.4	19.7	20.1	20.4	2011	21.6	21 7	21.9	22.1	22.4	22.6	22.7	22.9	23.1
23.5 24.0	15.4	16.4	17.3	18.1	18.7	19.2	19.7	20.2	20.0	20.7	21.7	22.0	22 2	22.6	22.8	23.1	23.3	23.5	23.7	23.9	24.1
24.5 25.0	16.0	-17.1	18.0	18.8	19.5	20.0	20.2	21.0	21.7	41.0	26.1		23.2	22 5	22.8	24.0	24.2	24.5	24.7	24.9	25.1
25.5 26.0	16.6	17.8	18.7	19.5	20.2	20.8	21.5	21.0	24.3	22.	23.0	23.4	24 1	24 4	24.7	24.9	25.2	25.4	25.6	25.8	26.0
26.5 27.0	16.9	18.1	19.1	19.9	20.0	2112	21.0	26.5	22.1	2215	22.0	24 2	24 4	24.9	25.1	25.4	25.7	25.9	26.1	26.3	26.5
27.5 28.0	17.5	18.8	19.8	20.6	21.3	22.0	22.0	23.1	23.5	20.7	24.0	25 1	28 8	25 8	26.1	26.3	26.6	26.8	27.1	27.3	27.5
28.5 29.0	18,1	19.4	20.5	21.3	22.1	22.8	23.4	23.9	24.4	27.0	23.6	25,0	26.4	26 7	27.0	27.3	27.5	27.8	28.0	28.3	28.5
29.5 30.0	18.7	20.1	. 21.2	22.1	22.9	23.3	64.4	27.	23.2	24 1	24 5	24 0	27 3	27 6	27.9	28.2	28.5	28.8	29.0	29.2	29.5
30.5 31.0	19.4	20.7	21.9	22.8	23.6	24.3	25.0	25.5	20.0	20.7	2007	97 0	2 6 1	28 5	28.A	29.1	29.4	29.7	30.0	30.2	30.5
31.5 32.0	20.0	21.4	22.5	23.5	24.4	25.1	25.0	20.3	20.7	27.7	28 2	20.2	29 0	20.4	29.7	30.1	30.4	30.7	30.9	31.2	31.4
32.5	20.6	22.0	23.2	24.2	25.1	25.9	26.6	27.2	27.7	28.2	28.7	29.1	29.5	29.9	30.2	31.0	31.3	31.6	31.9	32.2	32.4
33.0 33.5	21.2	22.	7 23.9	25.0	25.9	20.0	27.3	28.0	20.5	27.1	27.7	30.0	30.7	21 2	21.6	31.9	32.2	32.6	32.8	33.1	33.4
34.0 34.5	21.	3 23.3	3 24.6	25.7	20.0	2/14	28.1	20.0	27,7	27.7	30.4	21.2	21.7	32.1	32.5	32.9	33.2	33.5	33.8	34.1	34.4
35.0 35.5	22.4	4 24.0	0 25.3	26.4	27.4	28,2	28.9	29.0	30.2	30.0	21.2	33 3	32.4	33.0	33.4	33.8	34.1	34.5	34.8	35.1	35.3
36.0 36.5	23.0	0 24.	6 26.0	27.1	28.1	29.0	29.1	30.4	31.0	31.0	25.1	22 0	33 E	22.0	34.3	34.7	35.1	35.4	35.7	36.0	36.3
37.0 37.5	23.	6 25.	3 26.	7 27.8	28.8	29.7	30.5	31.2	21.7	22.7	39.0	33 6	34 4	24 A	35.2	35.6	36.0	36.4	36.7	37.0	37.3
38.0 38.5	24.	2 25.	9 27.	3 28.5	29.0	30.5	31.3	32.0	32.1	22.2	33.0	34.6	24.2	35.7	36.2	36.6	36.9	37.3	37.6	38.0	38.3
39.0 39.5	24.	5 26.	2 27.	7 28.9	30.0	30,9	31./	32.4	29.1	20.1	34.7	25	2 2 9 7	36.2	36.6	37.0	37.4	37.8	38.1	38.5	38.8
40.0 40.5	25.	0 26.	9 28.4	4 29.6	30.7	31.0	32.5	33.2	22.7	34.0	35 4	34	34 4	27.1	37.5	38.0	38.3	38.7	39.1	39.4	39.7
41.0 41.5	25.	6 27.	5 29.	0 30.3	31.4	32.4	33.3	34 • 1	34.0	37.7	34 4	37	27	38.0	38.4	38.9	39.3	39.7	40.0	40.4	40.7
42.0 42.5	26.	2 28.	1 29.	7 31.0	32.2	33,2	34.1	34.7	99.0	30.2	30.7		38 /	20 6	20.4	29.5	40.2	40.6	41.0	41.4	41.7
43.0	26.	8 28.	8 30.	4 31.7	32.9	33.7	34,0	33.1	30.	37.6	201	20	7 20 1	39	40.3	40.	41.2	41.6	42.0	42.3	42.7
43.5 44.0	27.	4 29.	4 31.	1 32.4	33.6	34,7	35.0	30.3	37.4	20103	30.0	30	6 40.3	2 40.	7 41.2	41.6	42.	42.	42.9	43.3	43.7
44.5 45.0	28.	0 30.	0 31.	7 33.1	34.4	35.4	30.4	37.5	, ,,,,	30.0	30 1	40	E 41 /	0 41 4	42	42.	43.0	43.	43.9	44.3	44.6
45.5 46.0	28.	6 30.	7 32.	4 33.8	35.1	30,2	31.4	90.1	30,	, ,,,,,		7 41	2 41 (0 42	5 43 (43.	5 44.0	44.	44.1	45.2	45.6
46.5 47.0	29.	1 31.	3 33.	1 34.	35.8	37.0	38.0	30.	37.	40.		4 42	2 42.	8 43.	4 43.	44.	4 44.	45.	3 45.	8 46.2	46.6
47.5 48.0	29.	7 31.	9 33.	7 35.7	36.6	37.7	38.	39.	40.	2 71.00	7 49	4 42	1 43	7 44	3 44	8 45.	3 45.	8 46.	3 46.	7 47.2	47.6
48.5 49.0	30.	,3 32.	.5 34.	4 35.	9 37.3	38,5	37.3	40.	41.	3 72°		0 43. 2 43	0 44	4 45	2 45	7 46.	3 46.	8 47.	2 47.	7 48.	48.5
49.5 50.0	30 . 30 .	9 33	2 35.	0 36.	6 38.0	39.2	40.3	41.	3 42.	1 42.	9 43.	7 44.	4 45.	0 45.	6 46.	2 46.	7 47.	2 47.	7 48.	2 48.0	49.0

STUMP DOB	0.0 0.2 0.4	0.6 0.8 1.0 1.2	STUMP HEIGHT		4 2.6 2.8 3.0	3.2 3.4 3.6 3.8 4.0
5.0 5.5		4.1 4.2 4.3 4.4 4.5 4.6 4.7 4.8	4.4 4.5 4.5 4.9 4.9 5.0	4.6 4.6 4.7 5.0 5.1 5.1	1 5.2 5.2 5.3	4.8 4.9 4.9 4.9 4.9 5.3 5.3 5.4 5.4 5.4
6.0	4.4 4.6 4.7	4.9 5.0 5.1 5.2 5.3 5.4 5.5 5.6	5.3 5.4 5.4 5.7 5.8 5.9	5.5 5.6 5.6 6.0 6.0 6.1		5,8 5.8 5.9 5.9 5.9 6.3 6.3 6.3 6.4 6.4
7.0	5.1 5.3 5.5	5.7 5.8 6.0 6.1	6.2 6.3 6.3 6.6 6.6 6.7 6.8	6.4 6.5 6.5	5 6.6 6.7 6.7	6.7 6.8 6.8 6.9 6.9 7.2 7.3 7.3 7.4 7.4
7.5 8.0	5.8 6.1 6.3	6.1 6.2 6.4 6.5 6.5 6.7 6.8 6.9	7.0 7.1 7.2	7.3 7.4 7.5	5 7.5 7.6 7.7	7.7 7.8 7.8 7.9 7.9 8.2 8.2 8.3 8.3 8.4
8.5 9.0	6.5 6.8 7.1	6.9 7.1 7.2 7.3 7.3 7.5 7.6 7.8	7.5 7.6 7.7 7.9 8.0 8.1	7.8 7.8 7.9 8.2 8.3 8.4	4 8.5 8.5 8.6	8.7 8.7 8.8 8.8 8.9
9.5 10.0		7.7 7.9 8.0 8.2 8.1 8.3 8.4 8.6	8.3 8.4 8.6 8.8 8.9 9.0	8.7 8.8 8.8 9.1 9.2 9.3	3 9.4 9.5 9.5	9.1 9.2 9.3 9.3 9.4 9.6 9.7 9.7 9.8 9.9
10.5	7.5 7.9 8.2	8.4 8.7 8.9 9.0	9.2 9.3 9.4 9.6 9.8 9.9	9.6 9.7 9.8 10.0 10.1 10.2	2 10.3 10.4 10.5	10.1 10.2 10.2 10.3 10.4 10.6 10.6 10.7 10.8 10.8
11.5	8.2 8.6 8.9	9 2 9 5 9 7 9 9	10.0 10.2 10.3	10.4 10.6 10.7	7 10.8 10.9 11.0	11.0 11.1 11.2 11.3 11.3 11.5 11.6 11.7 11.8 11.8
12.0 12.5	0 0 0 2 0 7 1	A A 1A 2 1A 5 1A 7	10.9 11.0 11.2	11.2 11.5 11.6	6 11.7 11.8 11.9	12.0 12.1 12.2 12.2 12.3
13.0 13.5	0 5 10 0 10 4 1	A 8 11 1 11.3 11.5	11.7 11.9 12.1	17.2 17.4 12.5	5 12.0 12./ 12.0	12.5 12.6 12.6 12.7 12.8 12.9 13.0 13.1 13.2 13.3
14.0 14.5	9.9 10.4 10.8 1	11.1 11.4 11.7 11.9	12.1 12.3 12.5	12.7 12.8 12.9 13.1 13.3 13.4	9 13.1 13.2 13.3 4 13.5 13.7 13.8	13.4 13.5 13.6 13.7 13.8
15.0		. 1 0 12 2 12 K 12.R	12.0 12.2 12.4	13.5 13.7 13.9	9 14.0 14.1 14.4	14.4 14.5 14.6 14.7 14.8 14.8 15.0 15.1 15.2 15.3
15.5 16.0		. 7 12 7 12 2 12 6	12.8 14.0 14.7	14.4 14.5 14.8	8 14.9 15.0 15.2	15.3 12.4 12.2 12.7 12.0
16.5 17.0	11 8 12 5 12 0 1	12 4 12.8 14.1 14.4	14.7 14.9 15.1	15.3 15.5 15.	7 10.0 10.0 10.1	15.8 15.9 16.0 16.1 16.2 16.3 16.4 16.5 16.6 16.7
17.5 18.0	12.2 12.8 13.3 1	13.8 14.2 14.5 14.8	15.1 15.3 15.5	15.7 15.9 16.1	6 16.7 16.9 17.0	17.2 17.3 17.5 17.6 17.7
18.5	12 8 12 5 14 1 1	14 K 14 Q 15.7 15.6	15.9 16.2 16.4	16.6 16.8 17.	0 17.2 1764 17.5	17.7 17.8 17.9 18.1 18.2 18.1 18.3 18.4 18.6 18.7
19.0 19.5	13 5 1/ 2 1/ 8 1	16 2 16.7 16.1 16.4	16.7 17.0 17.7	17.5 17.7 17.	7 10.1 10.2 10.4	18.0 10.0 10.7 17.0 17.2
20.0 20.5	13.8 14.5 15.1 1	15.6 16.1 16.5 16.8	17.1 17.4 17.7 17.5 17.8 18.1	17.9 18.1 18.	8 19.0 19.2 19.4	19.5 19.7 19.9 20.0 20.2
21.0 21.5	14.4 15.2 15.8 1	16.4 16.8 17.2 17.6	17.9 18.2 18.5	18.8 19.0 19.	2 19.4 19.6 19.8 7 19.9 20.1 20.3	20.5 20.7 20.8 21.0 21.1
22.0	16 0 15 9 16 5 1	17 1 17.6 18.0 18.4	18.7 19.1 19.4	19.6 19.9 20.	1 20.3 20.6 20.8	20.9 21.1 21.3 21.5 21.6 21.4 21.6 21.8 21.9 22.1
22.5 23.0	15 6 16 5 17 2 1	17 8 18.3 18.8 19.2	19.6 19.9 20.2	20.5 20.8 21.	0 21.2 21.5 21.7	21.9 22.1 22.3 22.4 22.0
23.5 24.0	14 2 17 2 17 0 1	19 6 19 1 19 5 20.0	20.4 20.7 21.0	21.3 21.6 21.	9 72.1 22.4 22.6	22.3 22.5 22.7 22.9 23.1 22.8 23.0 23.2 23.4 23.6
24.5	16-6 17.5 18.2 1	18.9 19.4 19.9 20.4 19.2 19.8 20.3 20.6	20.8 21.1 21.5	21.8 22.1 22.	.8 23.0 23.3 23.5	23.7 24.0 24.2 24.4 24.5
25.0 25.5		10 4 20 2 20 7 21 1	21 6 21 9 22.3	22.6 22.9 23.	. 7 7 7 4 4 7 4 4 6 7 7 7 7 8 7 8 7 8 7 8 7 8 7 8 7 8 7 8	24.2 24.4 24.0 24.0 27.0
26.0 26.5	17 0 10 0 10 6 7	2 A 2 2 A B 21 4 21 5	1 22.4 22.8 23.1	27.5 23.8 24.	. 74.4 24.0 24.7	24.7 24.9 25.1 25.3 25.5 25.1 25.4 25.6 25.8 26.0
27.0 27.5	18.1 19.1 19.9 2	20.6 21.3 21.8 22.3	22.8 23.2 23.5	23.9 24.2 24.	,5 24.0 25.1 27.3 .0 25.2 25.5 25.8	26.1 26.3 26.5 26.8 27.0
28.0	10 7 10 7 20 6 7	1 1 2 22 A 22 A 22 1	22.5 24.0 24.4	24. / 25.1 25.	.4 73.1 20.0 20.3	26.5 26.8 27.0 27.2 27.5 27.0 27.2 27.5 27.7 28.0
28.5 29.0	10 2 20 2 21 2 2	22 4 22.7 22.2 22.5	1 24.3 24.8 25.2	25.6 25.9 26.	.3 20.0 20.7 21.2	21.4 21.1 20.0 20.2 20.4
29.5 30.0	10 0 11 0 11 0 1	22 2 22 4 24 6 24.4	. OK.1 OK.6 O6.0	24.4 26.8 27.	. 1 //.5 Z/.0 Z0.1	27.9 28.2 28.4 28.7 28.9 28.4 28.6 28.9 29.2 29.4
30.5 31.0	20.1 21.3 22.2 2	23.1 23.8 24.4 25.0) 25.5 26.0 26.4 . 25.9 26.4 26.8	20.8 27.2 27.	.6 27.9 28.2 28.3 .0 28.3 28.7 29.0	29.3 29.6 29.9 30.1 30.4
31.5	20 7 21 0 22 0 4	2 7 24 5 25 t 25."	7 26.3 26.8 27.2	27.6 28.0 28.	.4 28.8 29.1 29.4	29.7 30.0 30.3 30.6 30.9 30.2 30.5 30.8 31.1 31.4
32.0 32.5	E E	24 4 25 2 25 Q 26 I	. 27.∧ 27.6 28.0	28.5 28.9 29.	.3 79.0 30.0 30.3	0 30.0 / 31.0 31.3 31.0 31.0
33.0 33.5	21 9 22 1 26 2	25 1 25 0 26 6 27.3)	29.3 29.7 30.	. 1 30.5 30.7 31.2	31.1 31.4 31.7 32.0 32.3 31.6 31.9 32.2 32.5 32.8
34.0 34.5	22.1 23.4 24.5	25.4 26.2 27.0 27.0	5 28.2 28.7 29.2 5 28.6 29.1 29.6	29.7 30.1 30.	.6 31.0 31.3 31.4 .0 31.4 31.8 32.1	32.5 32.8 33.2 33.5 33.8
35.0	22 6 24 0 25 1	36 1 36 Q 37 7 38.1	3 29.0 29.5 30.0	30.5 31.0 31.	.4 31.8 32.2 32.6	32.9 33.3 33.6 33.9 34.3 33.4 33.8 34.1 34.4 34.7
35.5 36.0	22 2 24 4 25 7	24 7 27 4 28 4 29.	1 29.7 20.2 20.8	31.3 31.8 32.	.3 32./ 33.1 33.3) 33.7 34.6 34.0 34.7 32.6
36.5 37.0	22 7 25 2 26 4	27 4 28.2 29.1 29.1	1 70.5 71.1 71.6	32.2 32.6 33.	. 1 33.0 34.0 34.0	34.3 34.7 35.0 35.4 35.7 34.8 35.1 35.5 35.9 36.2
37.5 38.0	24.0 25.5 26.7	27.7 28.6 29.4 30.1	2 30.8 31.5 32.0 5 31.2 31.8 32.4	32.6 33.1 33.	.5 34.0 34.4 34.6 .0 34.4 34.9 3 5 .3	3 35.7 36.1 36.4 36.8 37.2
38.5	a/ E a6 a a7 a	48 / 38 3 34 1 34.	9 21.6 22.2 32. 8	71.4 77.9 76.	.4 34.0 35.3 35.	7 36.1 36.5 36.9 37.3 37.6 2 36.6 37.0 37.4 37.8 38.1
39.0 39.5	25 0 26 6 27 9	29 0 20.0 20.8 21.4	6 27.2 22.0 22.6	74.7 74./ 75.	. 2 35. / 30. 4 30. (3/00 3/03 3/07 3002 3000
40.0 40.5	25 6 27 2 28 5	20 4 20 4 21 5 22	2 22 1 22 R 24 4	35.0 35.5 30.	.1 30.0 3/.0 3/.	1 37.5 37.9 38.3 38.7 39.1 5 37.9 38.4 38.8 39.2 39.6
41.0 41.5	25.8 27.5 28.8	30.0 31.0 31.9 32.	7 33.4 34.1 34.8 1 33.8 34.5 35.2	35.4 35.9 36.	.9 37.4 37.9 38.4	4 38.8 39.3 39.7 40.1 40.5
42.0	24 2 28 2 20 4	2A & 21 & 22 & 22.	4 24.2 24.9 25.6	30.2 30.8 47	4 4/.0 30.3 30.	8 39.3 39.8 40.2 40.6 41.0 3 39.8 40.2 40.7 41.1 41.5
42.5 43.0	24 8 28 6 20 0	21 2 22 2 22 2 24.	1 24.9 25.6 26.2	37.0 37.6 38	. 1 30 . / 37 . 2 37 .	/ 40.2 40./ 41.1 41.0 42.0
43.5 44.0	27.1 28.8 30.3	31.5 32.6 33.6 34.	5 35.3 36.0 36.7 8 35.6 36.4 37.1	37.4 38.0 38	.0 39.1 39.0 40.	5 41.1 41.6 42.1 42.5 42.9
44.5 45.0	27.6 29.4 30.9	32.1 33.3 34.3 35.	2 36.0 36.8 37.5 5 36.4 37.1 37.9	38.2 38.8 39.	'.4 40.0 40.3 41. '.8 40.4 40.9 41.	5 42.0 42.5 43.0 43.5 43.9
45.5	29 1 29 9 21 4	22 8 22.9 24.9 25.	9 36.7 37.5 38.2	38.9 39.6 40	1.2 40.0 41.4 41.	9 42.4 43.0 43.4 43.9 44.4 44.9
46.0 46.5	30 6 30 6 33 0	22 4 24 5 25 6 26.	6 27.4 28.2 39. 0	39.7 40.4 41	.0 41.7 42.2 42.	8 43.5 43.7 44.4 44.7 42.5
47.0 47.5	28.8 30.7 32.3	33.7 34.9 35.9 36.	9 37.8 38.6 39.4 2 38.1 39.0 39.8	40.1 40.8 41	.4 42.1 42.7 43. .9 42.5 43.1 43.	7 44.2 44.8 45.3 45.8 46.3
48.0	29.3 31.2 32.9	34.3 35.5 36.6 37.	6 38.5 39.4 40.1 9 38.9 39.7 40.5	40.9 41.6 42	:.3 42.7 43.2 44. :.7 43.3 44.0 44.	6 45.1 45.7 46.2 46.8 47.3
48.5 49.0	30 0 31 0 33 6	34 0 34 1 37 7 30	3 30.7 An.1 An.9	41.7 42.4 49		U 49.0 70.1 70.1 7/06 7/0/
49.5 50.0	30.0 32.0 33.7 30.2 32.3 34.0	35.4 36.7 37.9 38.	9 39.9 40.8 41.7	42.4 43,2 43	1.9 44.6 45.2 45.	4 46.0 46.6 47.2 47.7 48.2 9 46.5 47.0 47.6 48.2 48.7

								57	IIMD H	EIGHT	! IN	FEET)									
STUMP	0.0	0.2	0.4	0.6	0.8						2.0	2.2	2,4	2.6	2.8	3.0	3.2		3.6	3.8	4.0
5.0	3.8	4.0	4.1	4.2	4.3	4.4	4.4	4.5	4.5	4.6	4.6	4.7	4.7	4.7	4.8	4.8	4.8	4.9	4.9	4.9	4.9
5.5	4.2	4.4	4.5	4.6	4.7	4.8	4.8	4.9	5.0	5.0	5.1	5.1	5.2	5.2	5.2	5.3	5.3	5.3	5.4	5.4	5.4
6.0	4.5	4.7	4.9	5.0	5.1	5.2	5.3	5.3	5.4	5.5	5.5	5,6	5.6	5.7	5.7	5.7	5.8	5.8	5.9	5.9	5.9
6.5	4.8	5.0	5.2	5.3	5.5	5.6	5.7	5.7	5.8	5.9	5.9	6.0	6.1	6.1	6.2	6.2	6.2	6.3	6.3	6.4	6.4
7.0	5.2	5.4	5.6	5.7	5.8	6.0	6.1	6.1	6.2	6.3	6.4	6.4	6.5	6.6	6.6	6.7	6.7	6.8	6.8	6.9	6.9
7.5	5.5	5.7	5.9	6.1	6.2	6.3	6.4	6 • 5	6.6	6.7	6.8	6,9	6.9	7.0	7.1	7.1	7.2	7.2	7.3	7.3	7.4
8.0	5.8	6.0	6.2	6.4	6.6	6.7	6.8	6.9	7.0	7.1	7 • 2	7.3	7.4	7.4	7.5	7.6	7.6	7.7	7.8	7.8 8.3	7.9 8.3
8.5	6.1	6.3	6.6	6.8	6.9	7.1	7.2	7.3	7.4	7.5	7.6	7.7	7.8	7.9	7.9	8.0	8.1	8.2	8.2	8.8	8.8
9.0	6.4	6.7	6.9	7.1	7.3	7.4	7.6	7.7	7.8	7.9	8.0	8.1	8.2	8.3	8.4	8.5	8.5	8.6	8.7 9.2	9.2	9.3
9.5	6.6	7.0	7.2	7.4	7.6	7.8	7.9	8 • 1	8.2	8.3	8.4	8.5	8.6	8.7	8.8	8.9	9.0	9.1	9.6	9.7	9.8
10.0	6.9	7.2	7.5	7.8	8.0	8.1	8.3	8 • 4	8.6	8.7	8.8	8.9	9.1	9.2	9.3	9.4	9.4	10.0			
10.5	7.2	7.5	7.8	8.1	8.3	8,5	8.7	8.8	9.0	9.1	9.2	9.4	9.5	9.6	9.7	9.8		10.5			
11.0	7.4	7.8	8.1	8.4	8.6	8.8	9.0	9.2	9.3	9,5	9.6	9.8	7.7	10.0	10.1	10.2	10.3	10.9	11.0	11.1	11.2
11.5	7.7	8.1	8.4	8.7	8.9	9.1	9.3	9.5	9.7	9.9	10.0	10.2	10.3	10.4	10.5	1111	11 2	11.4	11.5	11.6	11.7
12.0	7.9	8.3	8.7	9.0	9.2	9.5	9.7	9.9	10.1	10.2	10.4	10.5	10.7	10.0	11.0	11.6	11.2	11.8	11.9	12.1	12.2
12.5	8.1	8.6	9.0	9.3	9.5	9.8	10.0	10.2	10.4	11.0	10.8	10.9	11.1	11.2	11.8	12.0	12.1	12.3	12.4	12.5	12.7
13.0	8.4	8.8	9.2	9.5	9.8	10.1	10.3	10.6	10.8	11.3	11.1	1117	11.5	12 1	12.2	12.4	12.5	12.7	12.8	13.0	13.1
13.5	8.6	9.1	9.5	9.8	10.1	10.4	10.7	10.9	11.1	11.7	11.9	12 1	19 3	12 5	12.6	12.8	13.0	13.1	13.3	13.5	13.6
14.0	8.8	9.3							11.7	12.0	19 2	12 8	12.7	12.0	13.0	13.2	13.4	13.6	13.8	13.9	
14.5	9.0			10.4	10.7	11.0	11.3	11.5	11.0	12.4	12.6	12.8	13.0	13.2	13.4	13.6	13.8	14.0	14.2	14.4	14.6
15.0	9.2	9.7	10.2	10.6	11.0	11.3	11.0	11.7	12.1	12.7	12.0	13.2	13.4	13.6	13.8	14.1	14.3	14.5			15.0
15.5	9.4	10.0	10.4			11 0	177	12.5	17 8	1 a - n	14.4	14-7	1.0 - 5	1 ಈ ⊾ ∪	19.2	14.3	140	1707	7407	2000	15.5
16.0			10.7	11 2	11 7	12 1	12.5	12.B	12.1	13.4	13.6	13.9	14.2	14.4	14.0	14.7	13.1	10.0	1500	13.0	16.0
16.5			10.9		12 0	12 4	127	12.1	12.4	13.7	14.0	14.3	16.5	14.5	13.0	17.9	12.2	12.0	10.0	10.7	10.4
17.0					122	12 6	12 0	12 4	127	1 & . n	14.3	14.6	14.0	12.4	1.74	13.1	12.7	10.6	10.4	10.1	16.9
17.5					12 8	12 0	13 3	127	14 0	14.3	14./	ח היבו	12.3	12.2	17*0	10.1	10.7	10.0	101,	4	4 ' 4 7
18.0 18.5			* * *	122	127	12 1	12 5	12.0	14.3	14.5	חיכו	13.1	12.0	12.7	10.2	10.2	10.0	4 1 6 0	7107	1,10	1
19.0	10.5	11.2	11.9	12.4	120	12 4	12 R	14.7	1 A . A	15.0	15.4	13.0	10.0	10.3	10.0	-10.7	1106	4111	1,00	10.0	10.3
19.5			12 0	19 4	12 1	12 6	141	14.5	14.9	15.3	15.0	10.0	10.3	10.0	1100	14 . 3	11.0	1 (2 7	1007	1017	10.0
20.0		E	100		122	128	14 3	14.7	18.2	15.6	15.9	16.3	16.7	17.0	17.3	17.7	18.0	10.5	10.0	10.7	19.2
20.5			122	13 ^	12 6	141	14.5	15.0	1 4 - 4	13.8	10.2	10.0	11.0	1/. *	1101	10.1	10.0	101	4,47	4,14	4 , 1 ,
21.0			10 K		127	1 4 2	14 2	16.2	16.7	16.1	18.5	10.4	17.3	17.7	15.1	10.4	10.0	1716	7,47	1,40	20.5
21.5			12 6	122	12 0	14 5	15.0	15.5	16.0	16.4	1 A . B	17.5	17.7	10.1	10.7	10.0	4706	1710	. , , ,		20.0
22.0			11 0		1 / 1	14 7	18 2	18.7	16.7	16.7	17.1	17.0	10.0	10.9	10.0	17.5	17.0	~~:~	40.7	400	
22.5		12 1	12 0	12 4	14.3	14.9	15.4	16.0	16.5	17.0	17.4	17.9	10.0	10.0	1716	17.0	2000	2017	20.0	~ * * *	
23.0	11 3	122	12 ^	12 8	14 5	15 1	15.7	16.7	16.7	17.2	17.7	18.2	18.0	17.1	17.2	20.0	20.7	20.0	£ + + £	~ 1 . 0	22.0
23.5	11.3	12.3	13.2	120	14 4	15 2	15.0	16.4	17.0	17.5	18.0	18.5	19.0	17.7	17.7	20.0	20.0	6416	21.0	C. C. T	22.7
24.0	11.3	12.4	13.3	1 4 5	1 / 2	16 /	14.1	16.7	17.2	17.H	18.3	18.8	19.5	17.0	2002	20.1	6104	41.0	~~ + +	22.7	
24.5	11.4	12.4	13.4	14.2	14.9	15.6	16.3	16.9	17.5	18.0	18.6	19.1	19.6	20.1	20.6	21.1	21.5	22.0	22.0	22.7	23.8
25.0	11.4	_12.5	13.5	14.3	15.1	15.8	16.4	17.1	17.7	18.3	18.8	19.4	19.9	20,4	20.9	21.4	21.7	22.9	22.7	23.4	24.3
25.5	11.4			14.4	15.2	15.9	16.6	17.3	17.9	18.5	19.1	19.7	20.2	20./	21,3	21.0	22.3	22.2	23.7	24.2	24.8
26.0			12 4	14 2	18 2	16 1	1 A R	17.5	18.1	18.8	19.4	19.9	20.5	21.1	21.0	26.6	44.1	4214	6301	64.6	2410
26.5	11.5	12.7	13.7	14.6	15.5	16.2	17.0	17.7	18.3	19.0	14.0	20.2	20.0	21.7	22.3	22.0	23.4	24.0	24.6	25.1	25.7
27.0	11.5	12.7	13.8	14.7	15.6	16.4	17.1	17.9	18.6	19.2	17.7	20.5	21.1	27.4	22.4	23.2	23.0	24.4	25.0	25.5	26.1
27.5	11.5	12.7	13.8	14.8	15.7	16,5	17.3	18.0	18.8	19.4	20.1	20.0	21.4	22.0	22.0	22.4	24.2	24.8	25.4	26.0	26.4
28.0	11.5	12.8	13.9	14.9	15.8	16.7	17.5	18.2	19.0	19.7	20.4	21.0	41.7	44.3	23.0	23.0	24.2	. 2710	2007	_5.0	

STUMP								S	TUMP	HEIGH	T (IN	FEET									
008	0.0	0.2	0.4	0.6	0.8	1.0	1.2	1.4	1.6	1.8	2.0	2.2	2.4	2.6	2.8	3.0	3.2	3.4	3.6	3.8	4.0
5.0	3.2						4.2	4.3	4.4	4.4	4.5	4.6	4.6	4.7	4.7	4.8	4.8	4.8	4.9	4.9	4.9
5.5	3.6	3.8		4.2			4.6	4.7	4 . B	4.9	5.0	5.0	5.1	5.1	5.2	5.2	5.3	5.3	5.4	5.4	5.4
6.0	3.9	4.2		4.6		4.9	5.0	5.2	5.3	5.3	5.4	5.5	5.6	5,6	5.7	5.7		5.8	5.9	5.9	5.9
6.5	4.3	4.6		5.0			5,5	5.6	5.7	5.8	5,9	6.0	6.0	6.1	6.2	6.2	6.3	6.3	6.3	6.4	6.4
7.0 7.5	4.6	4.9				5.8	5.9	6.0	6.2	6.3	6.3	6.4	6.5	6.6	6.6	6.7	6.7	6.8	6.8	6.9	6.9
8.0	5.0	5.3		5.8			6.4	6.5	6.6	6.7	6.8	6,9	7.0	7.0	7.1	7.2	7.2	7.3	7.3	7.4	7.4
8.5	5.3 5.7	5.7 6.1		6.2		6.6	6.8	6.9	7.1	7.2	7.3	7.4	7.5	7.5	7.6	7.7	7.7	7,8	7.8	7.9	7.9
9.0	6.0	6.4	6.4	6.7 7.1		7.1	7.2	7.4	7.5	7.6	7.8	7.8	7.9	8.0	8.1	8.1	8.2	8.3	8.3	8.4	8.4
9.5	6.4	6.8	7.2	7.5	7.7		7.7 8.1	7.8 8.3	8.0	8.1 8.6	8.2	8.3	8.4	8.5	8.6	B.6	8.7	8.8	8.8	8.9	8.9
10.0	6.8	7.2	7.6	7 9		8.4	8.6	8.8	8.9	9.0	8.7 9.2	8.8 9.3	8.9	9.0	9.1	9.1		9.2	9.3	9.4	9.4
10.5	7.1	7.6	8.0	8.3		8.8	9.0	9.2	9.4	9.5	9.6	9.8	9.4	9.5	9.5	9.6	9.7	9.7	9.8		9.9
11.0	7.5	8.0	8.4	8.8		9.3	9.5	9.7				10.2		10 4	10.0	10.1	10.2	10.2	10.3	10.3	10.4
11.5	7.9	8.4	8.8	9.2					10.3	10.5	10-6	10.7	10.5	10.4	11.0	10.0	10.7	11.2	10.8	11.3	10.9
12.0	8.2	8.8	9.3	9.6			10.4	10.6	10.8	10.9	11.1	11.2	11.3	11 4	11.5	11.1	11.2	11.2	11.9	11.8	11.4
12.5	8.6	9.2	9.7	10.1	10.4	10.0	10.9	11.1	11.3	11.4	11.6	11.7	11.8	11 9	12.0	12 1	122	122	122	12 2	10 /
13.0	9.0	9.6	TOPT	10.5	10.5	11.1	11.3	11.6	11.7	11.9	12.0	12.2	12.3	12.4	12.5	12.A	12 7	12 7	12 0	12 0	120
13.5	9.4	10.0	10.0	10.9	11.3	11.0	11.5	12.0	12.2	12.4	12.5	12.7	12.8	12 9	12.0	12 1	12 2	12 2	122		12 /
14.0	7.0	10.4	10.9	11.4	11.7	12.0	12.3	12.5	12.7	12.9	13.0	13.2	13.3	13.4	12.5	12.6	12 7	12 7	12 0	12 0	12 0
14.5	10.2	10.0	11.4	11.5	12.2	14.5	12.7	13.0	13.2	13.4	13.5	13.7	13.A	12.9	14.0	14 1	1 / 2	14 2	1 / 2	1 / 2	4 4 4
15.0	10.0	11.3	11.8	12.3	12.6	12.9	13.Z	13.5	13.7	13.8	14.0	14.1	14.3	14.4	14.5	14 4	14 7	14 7	1 / 9	1 / 0	1 / 0
15.5 16.0	11.0	11./	12.2	12.7	13.1	13.4	13.7	13.9	14.1	14.3	14.5	14-6	14.8	14.9	15.0	15.1	15.2	15.2	15.3	15.3	15.4
16.5	11.9	17.1	12 1	13.6	13.0	13.9	14.4	14.4	14.6	14.8	15.0	15.1	15.3	15.4	15.5	15.6	15.7	15.7	15.8	15.9	15.9
17.0	12.2	13.0	13 6	14.1	14.0	14.4	14.7	14.9	15.1	15.3	15.5	15.6	15.8	15.9	16.0	16.1	16.2	16.2	16.3	16.4	16.4
17.5	12.6	13.4	14 0	14 5	15.0	15 2	15.4	15.4	13.0	12.0	10.0	10.1	10.3	16.4	16.5	16.6	16.7	16.7	16.8	16.9	16.9
18.0	13.0	13.8	14.5	15.0	15.4	15.8	16.1	16.4	16.1	16.0	17.0	10.0	10.0	10.9	1/00	17.1	17.2	17.2	17.3	17.4	17.4
18.5	13.4	14.3	14.9	15.5	15.9	16.3	16.6	16.9	17.1	17.3	17.5	1711	17.5	17.9	14/+2	17.0	17.7	17.8	17.8	17.9	17.9
19.0	13.9	14.7	15.4	15.9	16.4	16.8	17.1	17.4	17.6	17.8	18.0	18.2	18.2	18 4	10.5	10.1	10.2	10.5	10.5	18.9	18.4
19.5	14.3	12.2	10.0	10.4	10.7	1/.2	1/.5	17.9	18.1	18.3	18.5	18.7	18.8	18.9	19.0	19.1	10 2	10 3	10 2	10 /	10 /
20.0	14.7	12.0	10.3	10.9	1/.3	17.7	18.1	18.4	18.6	18.8	19.0	19.2	19.3	19.4	19.5	19.6	19.7	10.8	10 0	10 0	10 0
20.5	10.1	10.0	10.8	17.3	17.8	18.2	18.6	18.9	19.1	19.3	19.5	19.7	19.8	10.0	20.1	20 1	20 2	20 2	20 2	20 /	20 /
21.0	13.0	10.5	11.2	17.8	18.3	18.7	19.1	19.4	19.6	19.8	20.0	20.2	20.3	20.5	20.6	20.7	20 7	20 8	20 0	20.0	20.0
21.5	10.0	1/.0	1/./	18.3	18.8	19.2	19.5	19.9	20.1	20.3	20.5	20.7	20.9	21.0.	21.1	21 2	21 2	21 2	21 /	21 4	21 /
22.0	10.0	1/+4	18.2	18.8	19.5	19.7	20.1	20.4	20.A	20.9	21.1	21.2	21.4	21 K	21.6	71 7	21 0	21 0	21 0	21 0	22 .
22.5 23.0	10.7	17.9	18.0	19.3	19.8	20.2	20.6	20.9	21.2	21.4	21.6	21.7	21.9	22.0	22.1	22.2	22.3	22 3	22 4	22 /	22 5
23.5	11.3	10.3	12.1	17.0	20.3	20.7	21.1	21.4	21.7	21.9	22.1	22.3	22.4	22.5	22.6	22.7	22 R	22 9	22 0	22 0	22 ^
24.0	18 2	10.0	20 1	20.2	20.8	21.2	21.0	21.9	22.2	22.4	22.6	22.8	22.9	23.0	23.1	23.2	23.3	23.4	23.4	23.4	23.5
24.5	18 7	19 7	20.1	21.7	21.9	21.7	22.1	22.4	22.7	22.9	23.1	23.3	23.4	23.6	23.7	23.8	23.8	23.9	23.9	24.0	24.0
25.0	19-1	20.2	21.1	21.7	22.3	22.6	22.0	22.5	23.2	23.5	23.1	23.8	24.0	24.1	24.2	24.3	24.3	24.4	24.4	24.5	24.5
25.5	19.6	20.7	21.6	22.2	22.8	23.3	23.7	24.0	24.2	24.5	24.7	24.5	25 0	24.0	24.7	24.8	24.9	24.9	25.0	25.0 25.5	25.0
26.0	20.1	21.2	22.0	22.7	23.3	23.8	24.2	24.5	24.8	25.0	25.2	25.6	25 E	25 7	25 P	25.3	45.4	25.4	25.5	25.5	25.5
26.5	20.5	21.7	22.5	23.2	23.8	24.3	24.7	25.0	25.3	25.6	25.8	25.9	26.1	26.2	26.2	26 6	25.9	26.5	20.0	26.5	
27.0	21.0	22.1	23.0	23.8	24.3	24.8	25.2	25.6	25.9	26.1	26.3	26.5	26.6	26.7	26.8	26.9	24 9	27 0	27 0	27 0	27 0
27.5	21.5	22.6	23.5	24.3	24.9	25.4	25.8	26.1	26.4	26.6	26.8	27.0	27.1	27.2	27.3	27.4	27.5	27.5	27.5	27.5	27.5
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STUMP			STUMP HEIGHT				
DOB	0.0 0.2 0.4	0.6 0.8 1.0			2.4 2.6 2.8		
5.0 5.5	3.2 3.5 3.7 3.5 3.8 4.1	3.9 4.0 4.1 4.3 4.4 4.6	4.3 4.3 4.4 4.5	5.0 5.1	4.7 4.7 4.8 5.1 5.2 5.2	4.8 4.8 4.9 5.3 5.3 5.4	5.4 5.4 5.4
6.0	3.8 4.2 4.4	4.6 4.8 5.0 5.0 5.2 5.4	5.1 5.2 5.3 5.4 5.5 5.6 5.7 5.8	5.5 5.5 5.9 6.0	5.6 5.7 5.7 6.1 6.1 6.2	5.8 5.8 5.8 6.2 6.3 6.3	5.9 5.9 5.9 6.4 6.4 6.4
7.0	4.4 4.8 5.1	5.4 5.6 5.8	5.9 6.1 6.2 6.3	6.4 6.5	6.5 6.6 6.7 7.0 7.1 7.1	6.7 6.8 6.8 7.2 7.2 7.3	6.8 6.9 6.9 7.3 7.4 7.4
7.5 8.0	4.8 5.2 5.5 5.1 5.5 5.9	5.8 6.0 6.2 6.2 6.4 6.6	6.8 6.9 7.1 7.2	7.3 7.4	7.5 7.5 7.6	7.7 7.7 7.8 8.1 8.2 8.3	7.8 7.9 7.9
8.5 9.0	5.4 5.8 6.2 5.7 6.2 6.6	6.5 6.8 7.0 6.9 7.2 7.4	7.2 7.4 7.5 7.6 7.6 7.8 7.9 8.1	7.7 7.8 8.2 8.3	7.9 8.0 8.1 8.4 8.5 8.5	8.6 8.7 8.7	8.8 8.8 8.9
9.5	6.0 6.5 6.9 6.3 6.9 7.3	7.3 7.6 7.8 7.7 8.0 8.2	8.0 8.2 8.4 8.5 8.4 8.6 8.8 8.9	8.6 8.7 9.1 9.2	8.8 8.9 9.0 9.3 9.4 9.5		9.8 9.8 9.9
10.0	6.6 7.2 7.7	8.0 8.4 8.6	8 0 0.1 0.2 9.4	9.5 9.7	9.8 9.9 10.0	10.0 10.1 10.2	10.3 10.3 10.4
11.0 11.5	6.9 7.5 8.0 7.2 7.9 8.4	8.4 8.7 9.0 8.8 9.1 9.4	0.7 0010110.3	10.4 10.6	10.7 10.8 10.9	11.0 11.1 11.2	11.2 11.3 11.4
12.0 12.5	7.5 8.2 8.7 7.8 8.5 9.1	0 5 0 0 10 3	10.1 10.3 10.5 10.7 10.5 10.7 11.0 11.1	11.3 11.5	11.6 11.7 11.8	11.9 12.0 14.1	14.4 16.0 16.0
13.0 13.5	8.1 8.8 9.4	10 2 10 7 11 0	10.9 11.2 11.4 11.6 11.3 11.6 11.8 12.0	12.2 12.4	17.5 12.7 12.0	14.9 10.0 10.1	1306 1303 1303
14.0	8.7 9.5 10.1	10.6 11.1 11.4	11.7 12.0 12.2 12.5	12.7 12.8	13.0 13.1 13.2 13.4 13.6 13.7	13.8 13.9 14.0	14.1 14.2 14.3
14.5 15.0			13 6 13 8 12 1 14 4	13.5 14./	13.4 14.0 14.2	14.3 14.4 17.4	TASO TASI TASO
15.5 16.0			13.0 13.3 13.5 13.8 13.4 13.7 14.0 14.2				
16.5 17.0	10.2 11.1 11.9	12.5 13.0 13.4	13.8 14.1 14.4 14.0	14.9 15.1	15.7 15.9 16.0	16.2 16.3 16.4	16.6 16.7 16.8
17.5	10.7 11.8 12.5	13.2 13.7 14.2	14.6 14.9 15.2 15.5	15.7 10.0	16.2 10.3 10.3	17.1 17.3 17.4	17.5 17.6 17.8
18.0 18.5			15.4 15.8 16.1 16.4 15.8 16.2 16.5 16.8				
19.0 19.5							
20.0	12.2 13.3 14.3	15.0 15.6 16.1	16.6 17.0 17.3 17.7	17.9 18.2	18.4 18.6 18.6	19.5 19.6 19.	19.9 20.1 20.2
21.0	12.8 14.0 14.9	15.7 16.4 16.9	17.4 17.8 18.2 18.5	18.8 19.1	19.8 20.0 20.2	20.4 20.6 20.	20.9 21.1 21.2
21.5 22.0		14 / 17 1 17 7	18.2 18.6 19.0 19.4 18.6 19.0 19.4 19.8	19.7 20.0	70.7 ZU.3 ZU.1	20.7 61.1 61.	P PT - PT - D PT - 1
22.5 23.0			10 6 10 8 10 0 20 2	20.A 20.4	/1.1 /1.4 /1.5	2 21.00 22.00 22.0	6 6604 6607 660
23.5 24.0			19.4 19.9 20.3 20.7 19.8 20.3 20.7 21.1				
24.5	14.7 16.1 17.3	18.2 19.0 19.6	20.2 20.7 21.1 21.5	21.9 22.2	22.5 22.7 23.0	. 23.7 23.9 24.	1 24.3 24.5 24.6
25.0 25.5	15.3 16.7 17.9	18.9 19.7 20.4	21.0 21.5 21.9 22.4	22.7 23.1	23.8 24.1 24.4	4 24.6 24.8 25.	0 25.2 25.4 25.6
26.0 26.5			21.7 22.3 22.8 23.2 22.1 22.7 23.2 23.6				
27.0 27.5			22 5 22 1 22 6 24.5	74.4 74.8	/3./ /3.2 /24	, 20.0 Z0.2 20.	2 (00) (00)
28.0 28.5			22.9 23.5 24.0 24.5 23.3 23.9 24.4 24.9				
29.0 29.5	17.2 18.9 20.2	21.3 22.2 23.0	23.7 24.3 24.8 25.3	25.7 20.1	26.9 27.3 27.	6 27.9 28.1 28.	4 28.6 28.8 29.0
30.0	17.7 19.5 20.8	22.0 22.9 23.8	24.5 25.1 25.6 20.1	27-0 27-4	27.8 28.2 28.	5 28.8 29.1 29.	3 29.6 29.8 30.0
30.5 31.0		: ^^ 7 ^^ 7 O/ E	25.2 25.9 26.5 27.0 25.6 26.3 26.9 27.0	1 77.4 77.4	/0.1 /0.0 /0.	7 6716 6712 611	• J0 • 0 J0 • J J0 • J
31.5 32.0							
32.5 33.0	19.0 20.9 22.4	23.7 24.7 25.6	26.4 27.1 27.7 28.2	2 28.7 29.2	30.0 30.4 30.	8 31.1 31.4 31.	7 32.0 32.2 32.4
33.5	19.5 21.5 23.1	24.4 25.4 26.4	27.2 27.9 28.5 29.1	5 30.0 30.5	30.9 31.3 31.	7 32.0 32.3 32.	6 32.9 33.2 33.4
34.0 34.5			27.9 28.7 29.3 29.0 28.3 29.0 29.7 30.				
35.0 35.5							
36.0 36.5	20.8 22.9 24.6	5 26.0 27.2 28.2	29,1 29.8 30.5 31.	5 32.1 32.6	33.1 33.5 33.	9 34.3 34.7 35	0 35.3 35.6 35.9
37.0 37.5	21.3 23.5 25.3	3 26.7 27.9 28.9	29.8 30.6 31.3 31.	9 32.5 33.0 4 33 9 33.5	34.0 34.0 34.	8 35.2 35.6 35.	9 36.2 36.5 36.8
38.0	21.8 24.1 25.9	9 27.3 28.6 29.6	30.6 31.4 32.1 32.	8 33.4 33.9 2 33.8 34.3	34.4 34.7 35.	7 36.1 36.5 36	9 37.2 37.5 37.8
38.5 39.0		E 40 A 30 3 3A 4	31.3 32.2 32.9 33. 7 31.7 32.5 33.3 34.	N 44.2 44.8	12.1 22.1 20.	Z 30.0 31.0 311	12 2141 2010 2012
39.5 40.0		1 20 6 20 0 21 1	11 12 23 7 34	4 49-0 49-0	10.1 10.0 3/4	1 31.3 31.17 20	13 3010 3710 3713
40.5 41.0	23.1 25.5 27.4	4 29.0 30.3 31.4	32.4 33.3 34.1 34.	8 35.4 30.0 2 35.9 36.5	37.0 37.5 38.	0 38.4 38.8 39	2 39.6 39.9 40.2
41.5	23.6 26.0 28.0	0 29.6 31.0 32.2	2 33.2 34.1 34.9 35.	6 36.3 30.9 6 36 7 37.3	37.4 37.7 30. 37.9 38.4 38.	9 39.3 39.7 40	1 40.5 40.9 41.2
42.0 42.5		4 30 3 31 7 33 6	9 33.9 34.8 35.7 36. 2 34.3 35.2 36.1 36.	4 4/-1 4/-/	10.1 10.0 271	15 57 60 TUEL TU	
43.0 43.5		2 24 6 22 2 22 6	6 3/ 7 35.6 36.5 37.	2 37.9 38.6	39.2 39.7 401	IZ YUSI YISI TI	
44.0 44.5	24.8 27.4 29.	5 31.2 32.7 33.9	9 35.0 36.0 36.9 37. 3 35 4 36 4 37 2 38.	6 38.3 39.0 0 38.8 39.4	40.0 40.1 40.	1 41.6 42.0 42	5 42.9 43.3 43.6
45.0	25.2 27.9 30.	1 31.8 33.3 34.6	5 35.8 36.7 37.6 38. 5 36 1 37.1 38.0 38.	4 39.2 39.8 8 39.6 40.2	40.4 41.0 41.	0 42.5 43.0 43	.4 43.8 44.2 44.6
45.5 46.0	25.7 28.5 30.	7 32.5 34.0 35.3	3 36.5 37.5 38.4 39.	2 40.0 40.7 6 40.4 41.1	41.3 41.7 42.	9 43.4 43.9 44	.3 44.8 45.2 45.6
46.5 47.0	0/ 2 20 6 31	2 22 1 27 2 26 /	A 37 7 38 2 20 7 40.	0 40.8 41.5	47.7 42.0 45	., 43.0 44.2 77	47.7 47.1 40.1
47.5 48.0	26.4 29.3 31.	5 33.4 35.0 36.4	4 37.6 38.6 39.6 40. 7 37 8 38 0 40 0 40	4 41.2 41.9 8 41.6 42.3	, 42.0 43.2 43. , 43.0 43.6 44	.2 44.8 45.3 45	.7 46.2 46.6 47.0
48.5	26.9 29.8 32.	1 34.0 35.7 37.1	1 38.3 39.4 40.3 41.	42.0 42.8	43.4 44.1 44	.1 45.7 46.2 46	7 47.1 47.6 48.0
49.5			8 39.0 40.1 41.1 42. 1 39.4 40.5 41.5 42.				
50.0	41.0 30.0 33.	U 33.U 30.0 30,	A 3747 TUTA TATA TET				

STUMP				HEIGHT (IN F			
00B 5.0	0.0 0.2 0.4 3.5 3.7 3.9	0.6 0.8 1.0 4.0 4.1 4.2			2.2 2.4 2.6 4.6 4.7 4.7	2.8 3.0 3.2 4.8 4.8 4.8	
5.5 6.0	3.8 4.1 4.2 4.2 4.4 4.6	4.4 4.5 4.6	5 4.7 4.8 4.9	5.0 5.0	5.1 5.1 5.2 5.5 5.6 5.7	5.2 5.3 5.3	5.3 5.4 5.4 5.4
6.5 7.0	4.5 4.8 5.0 4.8 5.1 5.4	5.2 5.3 5,	5 5.6 5.7 5.8	5.9 5.9	6.0 6.1 6.1 6.5 6.6	6.2 6.2 6.3	6.3 6.4 6.4 6.4
7.5 8.0	5.2 5.5 5.7 5.5 5.8 6.1	6.0 6.1 6.	3 6.4 6.6 6.7	7 6.8 6.8	6.9 7.0 7.1 7.4 7.4 7.5	7.1 7.2 7.2	7.3 7.3 7.4 .7.4
8.5 9.0	5.8 6.2 6.5 6.2 6.5 6.9	6.7 6.9 7.1	7.3 7.4 7.5	7.6 7.7	7.8 7.9 8.0 8.3 8.4 8.4	8.1 8.1 8.2	8.2 8.3 8.3 8.4
9.5 10.0	6.5 6.9 7.2 6.8 7.2 7.6	7.5 7.7 7.9	8.1 8.3 8.4	8.5 8.6	8.7 8.8 8.9 9.2 9.3 9.4	9.0 9.1 9.1	9.2 9.3 9.3 9.4
10.5	7.1 7.6 8.0 7.5 7.9 8.3	8.3 8.5 8.	7 8.9 9.1 9.3	9.4 9.5	9.6 9.7 9.8	9.9 10.0 10.1	10.2 10.2 10.3 10.4 10.6 10.7 10.8 10.8
11.5 12.0	7.8 8.3 8.7 8.1 8.6 9.0	9.0 9.3 9.	9.8 9.9 10.1	1 10.3 10.4 1	0.5 10.6 10.8	10.9 11.0 11.0	11.1 11.2 11.3 11.3 11.6 11.7 11.8 11.8
12.5 13.0	8.4 9.0 9.4 8.7 9.3 9.8	9.8 10.1 10.3	3 10.6 10.8 11.0 7 11.0 11.2 11.4) 11.1 11.3 1 • 11.6 11.7 1	1.4 11.6 11.7	11.8 11.9 12.0	12.1 12.2 12.2 12.3 12.6 12.6 12.7 12.8
13.5 14.0	9.0 9.6 10.1	10.5 10.8 11.1	l 11.4 11.6 11.8	12.0 12.2 1	2.3 12.5 12.6	12.7 12.8 12.9	13.0 13.1 13.2 13.3 13.5 13.6 13.7 13.8
14.5 15.0	9.7 10.3 10.8	11.2 11.6 11.9	12.2 12.4 12.7	7 12.9 13.0 1	3.2 13.4 13.5	13.6 13.8 13.9	14.0 14.1 14.2 14.3 14.5 14.6 14.7 14.8
15.5 16.0	10.3 11.0 11.5	12.0 12.4 12.7	7 13.0 13.3 13.5	3 13.7 13.9 1	4.1 14.3 14.4	14.6 14.7 14.8	14.9 15.1 15.2 15.3 15.4 15.5 15.6 15.8
16.5 17.0	10.9 11.6 12.2	12.7 13.1 13.5	5 13.8 14.1 14.3 9 14.2 14.5 14.8	3 14.6 14.8 1 3 15.0 15.2 1	5.0 15.2 15.3 5.4 15.6 15.8	15.5 15.6 15.8 45.9 16.1 16.2	15.9 16.0 16.1 16.2
17.5 18.0	11.5 12.3 12.9 11.8 12.6 13.3	13.4 13.9 14.3 13.8 14.2 14.6	3 14.6 14.9 15.2 5 15.0 15.3 15.6	2 15.4 15.7 1 5 15.8 16.1 1	5.9 16.1 16.2 6.3 16.5 16.7	16.4 16.6 16.7 16.9 17.0 17.2	16.8 17.0 17.1 17.2 17.3 17.5 17.6 17.7
18.5 19.0	12.1 12.9 13.6 12.4 13.2 13.9	14.1 14.6 15.0 14.5 15.0 15.4) 15.4 15.7 16.0 15.8 16.1 16.4) 16.3 16.5 1 + 16.7 16.9 1	.6.7 16.9 17.1 .7.2 17.4 17.6	17.3 17.5 17.6 17.8 17.9 18.1	17.8 17.9 18.1 18.2 18.3 18.4 18.6 18.7
19.5 20.0	13.0 13.9 14.6	15.2 15.7 16.2	2 16.6 16.9 17.2	2 17.5 17.8 1	8.0 18.3 18.5	18.7 18.9 19.0	18.7 18.9 19.0 19.2 19.2 19.4 19.5 19.7
20.5 21.0	13.6 14.5 15.3	15.9 16.5 16.9	7 17.4 17.7 18.1	18.4 18.7 1	8.9 19.2 19.4	19.6 19.8 20.0	19.7 19.8 20.0 20.2 20.2 20.3 20.5 20.6
21.5 22.0	13.9 14.8 15.6 14.1 15.1 15.9	16.3 16.8 17.3 16.6 17.2 17.3	3 17.7 18.1 18.5 7 18.1 18.5 18.9	5 18.8 19.1 1 9 19.2 19.5 1	.9.3 19.6 19.8 .9.8 20.0 20.3	20.0 20.2 20.4 20.5 20.7 20.9	20.6 20.8 21.0 21.1 21.1 21.3 21.4 21.6
22.5 23.0	14.4 15.4 16.3 14.7 15.8 16.6	17.0 17.5 18.1 17.3 17.9 18.4	l 18.5 18.9 19.3 + 18.9 19.3 19.7	3 1 9.6 19.9 2 7 20.0 20.3 2	0.2 20.5 20.7 0.6 20.9 21.2	20.9 21.2 21.4 21.4 21.6 21.8	21.6 21.8 21.9 22.1
23.5	15.0 16.1 16.9 15.3 16.4 17.3	17.6 18.3 18.8 18.0 18.6 19.2	3 19.3 19.7 20.1 2 19.7 20.1 20.5	l 20.4 20.8 2 5 20.9 21.2 2	1.1 21.3 21.6 1.5 21.8 22.0	21.8 22.1 22.3 22.3 22.5 22.8	22.5 22.7 22.9 23.1 23.0 23.2 23.4 23.6
24.5 25.0	15.6 16.7 17.6 15.8 17.0 17.9	18.3 19.0 19.5	5 20.0 20.5 20.9 9 20.4 20.9 21.3	9 21.3 21.6 2 3 21.7 22.0 2	1.9 22.2 22.5 2.4 22.7 22.9	22.8 23.0 23.2 23.2 23.2	23.4 23.7 23.9 24.0
25.5 26.0	16.4 17.6 18.5	19.3 20.0 20.6	21.2 21.7 22.1	. 22.5 22.9 2	3.2 23.5 23.8	24.1 24.4 24.6	24.4 24.6 24.8 25.0 24.9 25.1 25.3 25.5
26.5	16.7 17.9 18.9 16.9 18.2 19.2	19.7 20.4 21.0) 21.6 22.1 22.5 • 21.9 22.4 22.9	5 22.9 23.3 2 9 23.3 23.7 2	3.6 24.0 24.3 4.1 24.4 24.7	24.5 24.8 25.1 25.0 25.3 25.5	25.3 25.6 25.8 26.0 25.8 26.0 26.3 26.5
27.5 28.0	17.5 18.8 19.8	20.7 21.4 22.1	22.7 23.2 23.7	24.1 24.5 2	4.9 25.2 25.6	25.9 26.2 26.5	26.3 26.5 26.7 27.0 26.7 27.0 27.2 27.5
28.5 29.0	18.0 19.3 20.4	21.3 22.1 22.8	3 23.4 24.0 24.5	5 24.9 25.3 2	5.7 26.1 26.4	26.8 27.1 27.4	27.2 27.4 27.7 27.9 27.7 27.9 28.2 28.4
29.5 30.0	18.5 19.9 21.0	22.0 22.8 23.5	5 24.2 24.7 25.3	3 25.7 26.2 2	6.6 27.0 27.3	27.7 28.0 28.3	28.1 28.4 28.7 28.9 28.6 28.9 29.1 29.4
30.5	19.0 20.5 21.7	22.6 23.5 24.2	24.9 25.5 26.0	26.5 27.0 2	7.4 27.8 28.2	28.5 28.9 29.2	29.0 29.3 29.6 29.9 29.5 29.8 30.1 30.4
31.5	19.6 21.0 22.3	23.3 24.2 24.9	25.6 26.2 26.8	27.3 27.8 2	8.2 28.7 29.1	29.4 29.8 30.1	30.0 30.3 30.6 30.8 30.4 30.7 31.0 31.3
32.5 33.0	20.1 21.6 22.9	23.9 24.8 25.6	26.3 27.0 27.6	28.1 28.6 2	9.1 29.5 29.9	30.3 30.7 31.0	30.9 31.2 31.5 31.8 31.4 31.7 32.0 32.3
33.5 34.0	20.6 22.2 23.5	24.6 25.5 26.3	3 27.1 27.7 28.3	1 28.9 29.4 2	9.9 30.4 30.8	31.2 31.6 31.9	31.8 32.2 32.5 32.8 32.3 32.6 32.9 33.3
34.5 35.0 35.5	21.1 22.7 24.0	25.2 26.2 27.0) 27.8 28.5 29.1	. 29.7 30.2 3	0.7 31.2 31.6	32.1 32.5 32.8	32.7 33.1 33.4 33.7 33.2 33.6 33.9 34.2
36.0 36.5	21.5 23.2 24.6	25.8 26.8 27.7	' 28.5 29.2 29.9	30.5 31.0 3	1.5 32.0 32.5	32.9 33.4 33.7	33.7 34.0 34.4 34.7 34.1 34.5 34.9 35.2
37.0 37.5	22.0 23.8 25.2	26.4 27.5 28.4	29.2 29.9 30.6	31.2 31.8 3	2.4 32.9 33.3	33.8 34.2 34.7	34.6 35.0 35.3 35.7 35.0 35.4 35.8 36.2
38.0	22.5 24.3 25.8	27.0 28.1 29.1	. 29.9 30.7 31.4	32.0 32.6 3	3.2 33.7 34.2	34.7 35.1 35.6	35.5 35.9 36.3 36.6 36.0 36.4 36.7 37.1 36.4 36.8 37.2 37.6
39.0 39.5	23.0 24.8 26.3	27.6 28.7 29.7	30.6 31.4 32.1	32.8 33.4 3	4.0 34.5 35.0	35.5 36.0 36.5	36.9 37.3 37.7 38.1 37.3 37.8 38.2 38.6
40.0	23.4 25.3 26.9	28.2 29.4 30.4	31.3 32.1 32.9	33.5 34.2 3	4.8 35.4 35.9	36.4 36.9 37.4	37.8 38.2 38.6 39.0 38.3 38.7 39.1 39.5
41.0	23.9 25.8 27.5	28.8 30.0 31.0	32.0 32.8 33.6	34.3 35.0 3	5.6 36.2 36.7	37.3 37.8 38.2	38.7 39.2 39.6 40.0 39.2 39.6 40.1 40.5
42.0 42.5	24.3 26.3 28.0	29.4 30.6 31.7	' 32.7 33.5 34.3	35.1 35.7 3	6.4 37.0 37.6	38.1 38.6 39.1	39.6 40.1 40.5 41.0 40.1 40.6 41.0 41.4
43.0 43.5	24.8 26.8 28.5	30.0 31.2 32,3	33.3 34.2 35.1	. 35.8 36.5 3	7.2 37.8 38.4	39.0 39.5 40.0	40.5 41.0 41.5 41.9
44.0 44.5	25.2 27.3 29.1	30.6 31.9 33.0	34.0 34.9 35.8	36.6 37.3 3	8.0 38.6 39.2	39.8 40.4 40.9	41.4 41.9 42.4 42.9 43.4
45.0 45.5	25.6 27.8 29.6	31.1 32.5 33.6	34.7 35.6 36.5	37.3 38.1 3	8.8 39.4 40.1	40.7 41.3 41.8	42.3 42.9 43.4 43.8 42.8 43.3
46.0	26.1 28.3 30.1	31.7 33.1 34.3	35.3 36.3 37.2	38.1 38.8 3	9.6 40.3 40.9	41.5 42.1 42.7	43.3 43.8 44.3 44.8 43.7 44.2 44.8 45.3
47.0 47.5	26.5 28.8 30.7	32.3 33.7 34.9	96.0 37.0 37.9) 38 .8 39.6 4	0.3 41.1 41.7	42.4 43.0 43.6	44.2 44.7 45.2 45.8
48.0 48.5	26.9 29.2 31.2	32.8 34.2 35.5	36.7 37.7 38.6	39.5 40.3 4	1.1 41.9 42.6	43.2 43.9 44.5	45.1 45.6 46.2 46.7 45.5 46.1 46.7 47.2
49.0	27.3 29.7 31.7	33.4 34.8 36.1	. 37.3 38.4 39.3	1 40.3 41.1 4	1.9 42.7 43.4	44.1 44.7 45.4	46.0 46.6 47.1 47.7 46.4 47.0 47.6 48.2
50.0	27.7 30.2 32.2	33.9 35.4 36.7	37.9 39.0 40.0	41.0 41.9 4	2.7 43.5 44.2	44.9 45.6 46.2	46.9 47.5 48.1 48.6

STUMP										1E I GHT								3.4	3.6		
DOB	0.0	0.2	0.4	0.6	0.8	1.0	1.2	1.4	. 1.0	1.8	2.0	2.2	2.4	2.6	2.0	3.0	3.2	J • *	2.0	3.8	4.0
5.0	3.5	3.8	4.0	4.2	4.3	4.4	4.5	4.6	4.7	4.7	4.8	4.8	4.8	4.9	4.9	4.9	4.9	4.9	5.0	5.0	5.0
5.5	3.9	4.2	4.4	4.6	4.7	4,9	5.0	5.0	5.1	5.2	5.2	5.3	5,3	5.3	5.4	5.4	5.4	5.4	5.5	5.5	5.5
6.0	4.2	4.6	4.8	5.0	5.2	5,3	5.4	5.5	5.6	5.7	5.7	5.8	5.8	5.8	5.9	5.9	5.9	5.9	6.0	6.0	6.0
6.5	4.6	4.9	5.2	5.4	5.6	5,8	5.9	6.0	6.1	6.1	6.2	6.2	6.3	6.3	6.4	6.4	6.4	6.4	6.5	6.5	6.5
7.0	4.9	5.3	5.6	5.9	6.0	6.2	6.3	6.4	6.5	6.6	6.7	6.7	6.8	6.8	6.9	6.9	6.9	6.9	6.9	7.0	7.0
7.5	5.3	5.7	6.0	6.3	6.5	6.6	6,8	6.9	7.0	7.1	7.1	7.2	7.3	7.3	7.3	7.4	7.4	7,4	7.4	7.5	7.5
8.0	5.7	6.1	6.4	6.7	6,9	7.1	7.2	7 • 4	7.5	7.6	7.6	7.7	7.7	7.8	7.8	7.9	7.9	7.9	7.9	8.0	8.0
8.5	6.0	6.5	6.9	7.1	7.4	7.5	7.7	7.8	7.9	8.0	8.1	8.2	8.2	8.3	8.3	8.4	8.4	8.4	8.4	8.5	8.5
9.0	6.4	6.9	7.3	7.6	7.8	8.0	8.2	8.3	8.4	8.5	8.6	8.7	8.7	8.8	8.8	8.9	8.9	8.9	8.9	9.0	9.0
9.5	6.8	7.3	7.7	8.0	8.2	8.4	8.6	8.8	8.9	9.0	9.1	9.1	9.2	9.3	9.3	9.4	9.4	9,4	9.4	9.5	9.5
10.0	7.1	7.7	8.1	8.4	8.7	8.9	9.1	9 • 2	9.4	9.5	9.6	9.6	9.7	9.8	9.8	9.8	9.9	9.9		10.0	
10.5	7.5	8.1	8.5	8.8	9.1	9.4	9.5	9.7	9.8	10.4								10.4			
11.0 11.5	7.9 8.2	8.8	8.9 9.3	9.3						10.9											
12.0	8.6	9.2								11.4											
12.5										11.9											
13.0										12.3											
13.5										12.8											
14.0	10.1																				
14.5	10.4																				
15.0	10.8																				
15.5	11.2																				
16.0	11.6																				
16.5	11.9																				
17.0	12.3																				
17.5	12.7 13.1																				
18.0 18.5	13.4																				
19.0	13.8																				
19.5	14.2																				
20.0	14.6																				
20.5	15.0																				
21.0	15.4	16.5	17.3	18.0	18.6	19.0	19.4	19.7	19.9	20.1	20.3	20.4	20.6	20.7	20.7	20.8	20.9	20.9	20.9	21.0	21.0
21.5	13.7	16.9	17.8	18.5	19.0	19.5	19.8	20.1	20.4	20.6	20.8	20.9	21.1	21.2	21.2	21.3	21.4	21.4	21.5	21.5	21.5
22.0	16.1																				
22.5	16.5																				
23.0	16.9																				
23.5	17.3																				
24.0 24.5	17.7 18.1																				
25.0	18.5																				
25.5	18.8																				
26.0	19.2																				
26.5	19.6																				
27.0	20.0																				
27.5	20.4																				
28.0	20.8																				
28.5	21.2	22.7	23.9	24.8	25.5	26.1	26.5	26.9	27.3	27.5	27.7	27.9	28.1	28.2	28.3	28.4	28.4	28.5	28.5	28.5	28.5
29.0	21.6																				
29.5	22.0																				
30.0	22.4																				
30.5	22.8																				
31.0	23.2																				
31.5	23.0	27.3	20.0	21.5	20.3	20.9	27.2	29.9	30.2	30.5	30.8	30.9	21.1	31.2	21.3	21.4	21.5	21.2	21.2	21.2	21.2

S TUMP DOB	0.0 0.2	0.4 0.6	0.8 1.0	1.2 1.4	TUMP HEI	GHT (IN		2.4 2.0	2.8	3.0	3.2 3.0	3.6	3.8	4.0
5.0 5.5		4.1 4.3 4.5 4.7	4.4 4.4	4.5 4.6		.7 4.7	4.7 5.2	4.8 4.6 5.3 5.3		4.9 5.3	4.9 4.9 5.4 5.4		4.9 5.4	5.0 5.5
6.0	4.6 4.8	5.0 5.1	5.2 5.3	5.4 5.5	5.5 5	.6 5.6	5.7	5.7 5.	5,8	5.8	5.9 5.9		5.9 6.4	6.0
6.5 7.0		5.4 5.5 5.8 5.9	5.6 5.7 6.1 6.2	5.8 5.9 6.3 6.4		.1 6.1 .5 6.6	6.2 6.6	6.7 6.			6.8 6.9	6.9	6.9	6.9
7.5	5.7 5.9	6.2 6.3	6.5 6.6	6.7 6.8		.0 7.0	7.1 7.6	7.2 7.7		7.3 7.8	7.8 7.4		7.4"	7.4
8.0 8.5		6.6 6.8 7.0 7.2	6.9 7.1 7.3 7.5	7.2 7.3		9 8.0	8.0	8.1 8.	2 8.2	8.2	8.3 8.	8.4	8.4	8.4
9.0	6.8 7.1	7.4 7.6	7.8 7.9	8.0 8.2		8.4 8.9	8.5 9.0	9.0 9.		8.7 9.2	9.3 9.1		8.9 9.4	8.9 9.4
9.5 10.0		7.8 8.0 8.2 8.4	8.2 8.3 8.6 8.8	8.9 9.1	9.2 9	9.4	9.4	9.5 9.0	9.6	9.7	9.7 9.	9.8	9.9	9.9
10.5		8.6 8.8 9.0 9.2	9.0 9.2 9.4 9.6	9.4 9.5	9.6 9 10.1 10	9.7 9.8 0.2 10.3	9.9 1 10.4 1	0.0 10.	0 10.1 5 10.6	10.2 1 10.7 1	0.2 10.	10.3	10.4	10.4
11.0 11.5	9.0	9.4 9.6	9.9 10.1	10.2 10.4	10.5 10	.6 10.7	10.8 1	0.9 11.	0 11.1	11.1 1	1.2 11.	2 11.3	11.4	11.4
12.0 12.5	0.3 9.8 1	0.1 10.4	10.3 10.5	11.1 11.3	3 11.4 11	5 11.7	11.8 1	1.8 11.	9 12.0	12.1 1	.2.2 12.	2 12.3	12.3	12.4
13.0	9.7 10.1 1 10.0 10.5 1	0 5 10 9	11 1 11 3	11.5 11.1	7 11.9 12	2.0 12.1	12.2 1	2.3 12.	4 12.5	12.6 1	2.6 12.	7 12.8	12.8	12.9
13.5 14.0	10 4 10-9 1	1.3 11.7	11.9 12.2	12.4 12.6	12.7 12	2.9 13.0	13.1 1	3.2 13.	3 13.4	13.5	3.6 13.	7 13.7	13.8	13.9
14.5	10.7 11.3 1	1.7 12.1	12.4 12.6	12.8 13.0	13.2 13	3.3 13.5	13.6 1	13.7 13.	8 13.9	14.0	[4.]]4.	2 14.2	14.3	14.4
15.0 15.5	11 4 12 0 1	2 5 12 0	12.2 12.4	13.7 13.6	14.1 14	. 2 14.4	14.5 1	4.6 14.	8 14.9	15.0 1	15.0 15.	1 15.2	15.3	15.3
16.0 16.5	11.8 12.4 1 12.1 12.7 1	2.9 13.3	13.6 13.9	14.1 14.3	3 14.5 14 3 15-0 15	5.7 14.8 5.1 15.3	15.0 1	15.1 15. 15.6 15.	2 15.3 7 15.8	15.9	15.5 15. 16.0 16.	1 16.2	15.8	16.3
17.0	12.5 13.1 1	3.6 14.0	14.4 14.7	15.0 15.2	2 15.4 15	5.6 15.7	15.9	10.0 10.	Z' 10.3	10.4	16.5 10.	10./	10./	10.8
17.5 18.0	12.8 13.5 1 13.2 13.8 1	4.4 14 8	15.2 15.5	15.8 16.	16.3 16	5.5 16.6	16.8	17.0 17.	1 17.2	17.3	17.4 17.	17.6	17.7	17.8
18.5	12 5 14.2 1	4.8 15.2	15.6 15.9	16.2 16.	5 16.7 16	5.9 17.1	17.3	17.4 17.	6 14.7	17.8	17.9 10.	0 18.1	10.2	18.3
19.0 19.5	13.8 14.6 1	5-5 16-0	16.4 16.8	17.1 17.	3 17.6 17	7.8 18.0	18.2	18.3 18.	5 18.6	18.7	18.9 19.	0 19.1	17.2	17.3
20.0	14.5 15.3 1 14.9 15.7 1	5.9 16.4	16.8 17.2	17.5 17.4	3 18.0 18	3.2 18.4	18.6	18.8 18.	9 19•1	19.2	19.3 19.	19.6	19.7	19.8
20.5 21.0	15 2 16-0 1	6.7 17 2	17.6 18.0	18.3 18.4	5 18.9 19	7.1 19.3	19.5	19.7 19.	9 20.0	20.2	20.3 20.	4 20.5	20.7	20.5
21.5	15.5 16.4 1 15.9 16.7 1	7.0 17.6	18.0 18.4	18.8 19.	1 19.3 19	9.6 19.8	20.0	20.2 20.	3 20.5	20.6	20.8 20.	9 21.0	21.1	21.2
22.0 22.5	16.2 17.1 1	7.8 18.3	18.8 19.2	19.6 19.	9 20.2 20	0.4 20.7	20.9	21.1 21.	3 21.4	21.6	21.7 21.	9 22.0	22.1	22.2
23.0 23.5	16.5 17.4 1 16.9 17.8 1	8 5 10 1	19.6 20.0	20.4 20.	8 21.0 21	1.3 21.6	21.8	22.0 22.	2 22.4	22.5	22.7 22.	8 Z3.0	23.1	23.2
24.0	17 2 18.1 1	8 9 19 5	20-0-20-4	20.8 21.	2 21.5 21	1.8 22.0	22.2	22.4 22.	6 ZZ.8	23.0	23.1 43.	3 63.4	23.0	23.1
24.5 25.0	17.5 18.5 1 17.9 18.8 1	9.6 20.2	20.8 21.3	21.7 22.	0 22.3 22	2.6 22.9	23.1	23.4 23.	6 23.7	23.9	24.1 24.	3 24.4	24.5	24.7
25.5	18.2 19.2 2 18.5 19.5 2	0 0 20 6	21.2 21.7	22.1 22.	4 29 R 27	3.1 23.3	23.6	23.8 24.	0 24.2	24.4	24.6 Z4.	7 24.9	25.0	20.2
26.0 26.5	18.8 19.9 2	20.7 21.4	22.0 22.5	22.9 23.	3 23.6 23	3.9 24.2	24.5	24.7 24.	9 25.1	25.3	25.5 22.	1 23.7	20.0	20.2
27.0 27.5	19.2 20.2 2)1.1 21.R	22.3 22.9	23.3 23.	7 24.0 24	4.4 24.6	24.9	23.2 23.	4 25.0	25.8	20.0 20.	4 20.3	20.0	20.0
28.0	19 8 20.9 2	71.R 99 5	23.1 23.6	24-1 24-	5 24.9 2	5.2 25.5	25.8	26.1 26.	3 26.5	26.7	26.9 27.	1 27.3	2/.5	27.0
28.5 29.0	20.1 21.2 2 20.4 21.6 2	2.5 23.2	23.9 24.4	24.9 25.	3 25.7 20	6.1 26.4	26.7	27.0 27.	2 27.4	27.7	27.9 28.	1 28.3	28.4	28.0
29.5	20.8 21.9 2	22.8 23.A	24.3 24.8	25.3 25.	8 26.2 26	6.5 26.8	27.1	27.4 27.	7 27.9	28.1	28.3 28.	5 28.7	20.9	29.1
30.0 30.5	21 4 22 6 2	22 6 24 4	25.0 25.6	26.1 26.	6 27 ₋ 0 2'	7.4 27.7	28.0	28.3 28.	6 28.8	29.1	29.3 29.	5 29.7	29.9	30.1
31.0 31.5	21.7 22.9 2	14.3 25 1	25.8 26.4	26.9 27.	4 27.8 21	8.2 28.6	28.9	29.2 29.	5 29./	30.0	30.Z 30.	4 30 . /	30.9	91.0
32.0	22.3 23.6 2	74.6 25.5	26.2 26.8	27.3 27.	8 28.2 2	8.6 29.0	29.3	29.6 29.	9 30.2	30.4	30.7 30	7 31.1	21.2	21.2
32.5 33.0	22.6 23.9 2	25.3 26.2	26.9 27.6	28.1 28.	6 29.1 2	9.5 29.9	30.2	30.5 30.	8 31.1	31.4	31.6 31.	9 32.1	32.3	32.5
33.5	22 2 24.6 2	7 7 7 5	27.3 27.9	28.5 29.	0 29.5 29	9.9 30.3	30.6	31.0 31.	3 31.6	31.8	32.1 32.	3 32.6	32.8	33.0
34.0 34.5	23.6 24.9 2	26 2 27 2	28.∩ 28.7	29.3 29.	8 30.3 31	0.8 31.1	31.5	31.9 32.	2 32.5	32.8	33.0 33.	3 33.0	33.6	34.0
35.0	24.2 25.6 2	26 7 27 6	28 4 29 1	29 7 30.	2 30.7 3	1.2 31.6	32.0	37.3 32.	6 32.9	33.2	33.5 33.	8 34.0	34.2	94.7
35.5 36.0	24.8 26.2 2	27.4 28.3	29.2 29.9	30.5 31.	1 31.6 3	2.0 32.4	32.8	33.2 33.	,5 33.8	34.1	34.4 34.	1 33.0	32.6	37.4
36.5 37.0	25.1 26.5 2	27.7 28.7 28 1 29 0	29.5 30.2	30.9 31.	5 32.0 3 9 32.4 3	2.4 32.9 2.8 33.3	33.3	34.1 34.	0 34.3 4 34.7	35.1	35.4 35	6 35.9	36.2	36.4
37.5	25.7 27.2 2	28.4 29.4	30.3 31.0	31.7 32.	3 32.8 3	3.3 33.7	34.1	34.5 34.	9 35.2	32.5	35.8 30	1 30.4	30.0	30.7
38.0 38.5	26.0 27.5 2 26.3 27.8 2	29.1 30.1	31.0 31.8	32.4 33.	0 33.6 3	4.1 34.6	35.0	35.4 35.	,8 36.1	30.4	36.8 37	1 37.3	3/.0	31.9
39.0	26.6 28.1 2 26.9 28.5	29.4 30.5	31.4 32.1	32.8 33.	4 34.0 3	4.5 35.0	35.4	35.8 36.	.2 36.6	30.9	37.2 31	,5 3/.0	36.1	38.4
39.5 40.0	27 1 28.8 3	30.1 31.2	32.1 32.9	1 77.6 74.	2 34.8 3	5.3 35.8	36.3	36.7 37	.1 37.5	37.8	38.1 38	.5 38.8	39.1	37.3
40.5 41.0	27.4 29.1 3 27.7 29.4 3	20.4 21.5	32.4 33.3	34.0 34.	6 35.2 3	5.8 36.2	36.7	37.1 37.	.5 37.9	38.3	38.6 38	9 39.2	37.5	37.8
41.5	28.0 29.7 3	31.1 32.2	33.2 34.0	34.8 35.	4 36.0 3	6.6 37.1	37.6	38.0 38	.4 38.8	39.2	39.5 39	9 40.2	40.5	40.8
42.0 42.5	28.3 30.0 3	31.7 32.9	33.9 34.7	35.5 36.	2 36.8 3	7.4 37.9	38.4	38.9 39	.3 39.7	40.1	40.5 40	.8 41.1	41.5	41.8
43.0	28.9 30.6	32.0 33.2	34.2 35.1	. 35.9 36.	6 37.2 3	7.8 38.3	38.8	39.3 39	.7 40.1	40.5	40.9 41	.3 41.6	41.9	42.3
43.5 44.0	29.2 30.9 29.4 31.2	32.7 33.9	34.9 35.9	36.7 37.	4 38.0 3	8.6 39.2	39.7	40.2 40	.6 41.0	41.4	41.8 42	. 2 42.0	42.9	43.2
44.5	29.7 31.5 30.0 31.8	33.0 34.2	35.3 36.2	37.0 37.	8 38.4 3	9.0 39.6	40.1	40.6 41	.1 41.5	41.9	42.3 42	.7 43.0	43.4	43.7
45.0 45.5	20 2 22 2	22 7 24 0	34 0 34 9) 27 R 38.	5 49.2 3	9-8 40-4	41.0	41.5 41	.9 42.4	42.8	43.2 43	. 6 44 0) 44.3	44.7
46.0 46.5	30.6 32.5	34.0 35.3 34.3 35.6	36.4 37.3 36.7 37.7	38.2 38. 7 38.5 39.	9 39.6 4	0.2 40.8 0.7 41.2	41.4	41.9 42	.4 42.8 .8 43.3	43.3	43.7 44	5 44.9	45.3	45.6
47.0	31.1 33.1	34.6 35.9	37.1 38.0	38.9 39.	7 40.4 4	1.1 41.7	42.2	42.7 43	.2 43.7	44.2	44.6 45	.0 45.4	. 45.8	40.1
47.5 48.0	31.4 33.3 31.7 33.6	35.3 36.6	. 37.7 38.8	39.6 40.	5 41.2 4	1.9 42.5	43.1	43.6 44	.1 44.6	45.1	45.5 45	9 46.3	3 40.7	4/.1
48.5	31.9 33.9 32.2 34.2	35.6 36.9	38.1 39.1	40.0 40.	8 41.6 4	2.3 42.9	43.5	44.0 44	. 6 45 0	45.5	40.0 40	. 4 40.0	3 41.62	47.0
49.0 49.5	32.5 34.5	36.2 37.6	. 38.8 39.8	3 40 8 41.	6 42.4 4	3.1 43.7	44.3	44.9 45	.4 45.9	40.4	46.9 4/	.3 47.	/ 48.2	48.0
50.0	32.7 34.8	36.5 37.9	39.1 40.2	2 41.1 42.	0 42.7 4	3.5 44.1	44.7	45.3 45	.9 46.4	40.9	47.3 47	,6 48.2	. 48.6	47.0

STUMP DOB	0.0 0.2 0.4 0	0.6 0.8 1.0 1.2		IN FEET)	6 2.8 3.0 3.2	3.4 3.6 3.8 4.0
5.0 5.5	3.9 4.1 4.3 4	4.4 4.5 4.6 4.7	4.8 4.9 5.0	4.6 4.6 4.7 4. 3.0 5.1 5.1 5.	2 5.2 5.3 5.3	5.3 5.4 5.4 5.4
6.0 6.5				5.5 5.5 5.6 5. 5.9 6.0 6.0 6.	1 6.2 6.2 6.3	6,3 6.3 6.4 6.4
7.0	4.9 5.2 5.4 5	5.6 5.7 5.9 6.0	6.1 6.2 6.3 6	5.4 6.4 6.5 6. 5.8 6.9 7.0 7.		
7.5 8.0		6.4 6.5 6.7 6.8	7.0 7.1 7.2	7.3 7.3 7.4 7.	5 7.6 7.6 7.7	7.7 7.8 7.8 7.9
8.5 9.0				7.7 7.8 7.9 8. 8.2 8.2 8.3 8.		
9.5	6.6 7.0 7.3 7	7.5 7.7 7.9 8.1	8.2 8.4 8.5	8.6 8.7 8.8 8.	9 9.0 9.0 9.1	9.2 9.2 9.3 9.4
10.0 10.5			9.1 9.2 9.4	9.0 9.1 9.2 9. 9.5 9.6 9.7 9.	8 9.9 10.0 10.1	10.1 10.2 10.3 10.3
11.0	7.6 8.0 8.3 8	8.6 8.9 9.1 9.3	9.5 9.6 9.8 9	9.9 10.0 10.1 10. 0.4 10.5 10.6 10.	3 10.4 10.4 10.5 7 10.8 10.9 11.0	10.6 10.7 10.8 10.8
11.5 12.0	0 7 0 7 0 1 0	0 4 0 7 0 9 10 1 1	0.3 10.5 10.6 10	0.8 10.9 11.1 11.	2 11.3 11.4 11.5	11.6 11.7 11.7 11.8
12.5		A 1 1A 4 1A 7 1A.9 1	1.1 11.3 11.5 1	1.7 11.8 11.9 12.	1 12.2 12.3 12.4	12.0 12.1 12.2 12.3
13.5	0 1 0 7 10 1 10	Λ K 1Λ.8 11.1 11.3 1	1.6 11.8 11.9 12	7.1 12.3 12.4 12.	2 12.7 14.0 14.7	1 73 60 73 67 73 67 73 63
14.0 14.5	0 9 10 4 10 9 11	1 2 11.6 11.9 12.1 1	7.4 17.6 17.8 1	a.n 14.1 15.5 15.	. 4 13.0 13.1 13.0	13.5 13.6 13.7 13.8
15.0	14 1 10 7 11 2 11	1 4 11 0 12 2 12 5 1	2.8 13.0 13.2 1º	3.4 13.6 13.7 13 <i>.</i>	9 14.0 14.2 14.3	14.4 14.5 14.6 14.8
15.5 16.0	14 7 11 2 11 9 12	o a 10 7 13.0 13.3 1	7.6 13.8 14.1 1	6.3 14.4 19.0 14 <i>1</i>	. 0 14.7 13.1 17.1	. 13.4 13.3 13.40 13.41
16.5	11.0 11.7 12.2 12	2.7 13.1 13.4 13.7 1	4.0 14.2 14.3 1	4./ 14.7 13.1 12. 5.1 15.3 15.5 15.	7 15.9 16.0 16.2	2 16.3 16.4 16.6 16.7
17.0 17.5	11 4 12 2 12 0 12	2 4 12.8 14.2 14.5 1	4.8 15.1 15.3 1	5.5 15.8 15.9 10.	1:10:3 10:3 10:0	10.0 10.7 1/.1 1/.2
18.0 18.5	12 2 12 0 12 6 14	4 1 14.5 14.9 15.3 1	5.6 15.9 16.1 1	8.4 10.0 ID.0 1/.	.U 15/02 1/04 1/01	1 17.3 17.4 17.5 17.7 5 17.7 17.9 18.0 18.2
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19.5 20.0		E 1 1E 4 16 1 16 4 1	A.B 17.1 17.4 1	7.7 17.9 18.1 18.	.4 18.5 18.5 19.	3 1701 1703 1703 1700
20.5	13.4 14.2 14.9 1	5.5 16.0 16.4 16.8 1 5.8 16.3 16.8 17.2 1	.7.2 17.5 17.8 1 7.6 17.9 18.2 1	8.1 18.3 18.6 18	.8 19.0 19.2 19. .2 19.5 19.7 19.	9 20.1 20.3 20.4 20.6
21.0 21.5	12 0 16 8 15 5 16	A 2 16.7 17.2 17.6 1	8.0 18.3 18.6 1	8.9 19.2 19.4 19	./ 19.9 ZO.1 ZO.	5 20.7 20.7 20.7 21.1
22.0 22.5	14 5 15 4 16 2 14	A R 17.4 17.9 18.2 1	8.7 19.1 19.4 l	9.7 20.0 20.3 20	.6 20.8 21.0 21.	8 21.0 21.2 21.4 21.6 3 21.5 21.7 21.9 22.1
23.0	14 8 15.7 14.5 1	7.2 17.8 18.3 18.7 1 7.5 18.1 18.6 19.1 1	9.1 19.5 19.8 2	0.2 20.5 20.7 21	.0 21.3 21.3 21.	7 24.7 22.1 22.3 22.3
23.5 24.0	18 2 16 2 17 1 1	7 8 18 4 19 0 19 5 1	9.9 20.3 20.6 2	11.0 21.3 21.6 21	.9 22.1 22.4 22.	0 44.7 43.1 43.3 43.3
24.5 25.0	15.6 16.6 17.5 1	8.2 18.8 19.3 19.8 2	20.3 20.7 21.1 2 20.7 21.1 21.5 2	(1.4 21.7 22.0 22 (1.8 22.1 22.5 22	.8 23.0 23.3 23.	6 23.8 24.0 24.3 24.5
25.5	14 1 17 7 10 1 1	B B 10 E 20 1 20 6 2	91.A 91.5 91.9 2	72.2 22.6 22.9 23	.2 23.5 23.7 24.	0 24.3 24.3 24.1 23.0
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27.0	14 0 19 1 10 0 1	9 9 20 5 21 1 21.7 2	22.2 22.6 23.0 2	13.4 23.8 24.2 24	.5 24.6 25.1 25.	4 25.7 25.9 26.2 26.4 8 26.1 26.4 26.6 26.9
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28.5 29.0	10 0 10 2 20 2 2	11 1 21.8 22.5 23.1 2	23.7 24.2 24.6 2	25.1 25.5 25.8 20	.2 20.0 20.9 27.	7 27.0 27.3 27.6 27.9 2 27.5 27.8 28.1 28.4
29.5	10 10 5 20 5 2	1 / 22 2 22 G 22.5 1	94.N 94.5 95.N 2	75.5 25.9 26.3 20	.0 27.0 21.3 21.	7 28.0 28.3 28.6 28.8 1 28.4 28.7 29.0 29.3
30.0 30.5	18 7 20 0 21 1 2	12 A 22 R 22 F 24.2 1	34.8 25.3 25.R 2	76.3 76.7 77.1 27	.5 27.9 20.2 20.	0 40,7 47.4 47.3 47.0
31.0	19.0 20.3 21.4 2	22.3 23.2 23.9 24.5 3	25.1 25.7 26.2 2 25.5 26.1 26.6 2	26.7 27.1 27.5 27 27.1 27.5 27.9 28	.3 28.7 29.1 29.	5 29.8 30.1 30.5 30.8
31.5 32.0	10 5 20 8 22 0 2	2 ^ 22.8 24.6 25.2 3	25.9 26.4 27.0 2	77.5 77.9 28.4 28	.8 29.2 29.2 29.	7 30.3 30.0 30.7 31.4
32.5 33.0	24 0 21.4 22.6 2) A	26.6 27.2 27.7 2	28.2 28.7 29.2 29	.0 30.0 30.4 30.	4 30.7 31.1 31.4 31.7 8 31.2 31.5 31.9 32.2
33.5			96.9 97.5 98.1 2	78.6 79.1 79.6 3 0	.0 30.0 30.7 31.	3 31.6 32.0 32.3 32.7 7 32.1 32.5 32.8 33.2
34.0 34.5	20 7 22 2 22 4 2	14 K 2K.4 2A.2 27.0 1	77.7 28.3 28.9 Z	29.4 29.9 30.4 30	.y 21.2 21.1 26.	Z 3Z.3 3Z.7 33.3 33.0
35.0 35.5	20.9 22.4 23.7 2	24.8 25.7 26.6 27.3 1 25.1 26.0 26.9 27.7 1	28.0 28.7 29.3 2 28.4 29.0 29.6 3	29.8 30.3 30.8 31 30.2 30.7 31.2 31	.7 32.2 32.6 33.	0 33.5 33.9 34.2 34.6
36.0	21 4 22 9 24 2 2	3 K 4 3 K 3 2 7 7 3 3 R A '	28.7 29.6 30.0 ·	50.6 31.1 31.0 <i>32</i>	. 1 32.0 33.1 33.	5 33.9 34.3 34.7 35.1 9 34.4 34.8 35.2 35.6
36.5 37.0	31 8 33 4 34 8 3	36 A 37.A 37.B 38.7	29.4 30.1 30.8 3	31.4 31.9 32.5 33	0.0 33.0 33.9 34.	4 34.0 33.2 33.0 30.0
37.5	22.0 23.7 25.1 2	26.2 27.3 28.2 29.0	29.8 30.5 31.1 3 30.1 30.8 31.5 3	31.7 32.3 32.9 33 32.1 32.7 33.3 33	1.4 33.9 34.4 34. 1.8 34.3 34.8 35.	3 35.7 36.2 36.6 37.0
38.0 38.5	5 -45 -5 -6 -5	14 R 27 Q 28 R 2Q 7	30.5 31.7 31.9	32.5 33.1 33.7 34	. 2 34. (33. 2 33.	1 30.6 30.0 31.1 31.0
39.0 39.5	22 9 24 7 26 1 2	97 4 28.5 29.5 30.3	31.2 31.9 32.6	33.3 33.9 34.5 33	0.U 30.0 30.L 30.	2 36.6 37.1 37.5 38.0 6 37.1 37.5 38.0 38.4
40.0	22 1 24 0 24 4 2	27 7 28 8 20 R 20 7	21.5 22.2 22.0	33.6 34.3 34.9 <u>3</u> 5	1.5 50.0 50.5 57.	0 37.5 38.0 38.5 38.9 5 38.0 38.5 38.9 39.4
40.5 41.0	99 4 95 4 96 Q 9	98 9 99.4 30.4 31.3	32.2 33.0 33.7	34.4 35.1 35.7 30	1.3 30.0 31.4 3/	7 20,4 20,7 27,4 27,7
41.5 42.0	23.8 25.6 27.2 2	28.5 29.7 30.7 31.7	32.5 33.3 34.1 3 22.9 32.7 34.4	34.8 35.4 36.1 30 35.2 35.8 36.5 37	7.1 37.7 38.3 38.	8 39.3 39.8 40.3 40.8
42.5	24 2 24 1 27 7 2	20 1 30.3 31.3 32.3	33.2 34.0 34.8 C	3515 36.2 36.9 3	(.) 30.1 30.1 37	, 2 37.0 40.3 40.0 41.3
43.0 43.5	24 6 26 6 28 2 2	29 A 20.8 21.9 22.9	33.9 34.7 35.5	36.3 37.0 37.7 30	5.3 38.9 39.3 40	.7 40.2 40.8 41.3 41.8 .1 40.7 41.2 41.7 42.3
44.0	24 9 24 9 29 4 4	20 0 21 1 22 2 22.3	24.2 25.1 25.9	36.6 37.4 38.1 38	3.7 39.4 40.0 40	.6 41.1 41.7 42.2 42.7 .0 41.6 42.1 42.7 43.2
44.5 45.0	26 2 27.2 28.9 2	3A 4 31.7 32.8 33.9	34.9 35.8 36.6	37.4 38.1 38.9 3	7.5 40.2 40.0 41	,4 42.0 42.0 43.1 43.1
45.5 46.0	25.4 27.5 29.2 3	30.7 32.0 33.1 34.2	35.2 36.1 37.0 35.5 36.4 37.3	37.8 38,5 39.2 3° 38.1 38.9 39.6 40	9.9 40.0 41.2 41 0.3 41.0 41.7 42	.3 42.9 43.5 44.1 44.6
46.5	28 9 27 0 20 7 3	21 2 22 5 22 7 24 8	25 B 26 B 27 7	38.5 39.3 40.0 40	0.7 41.4 42.1 4Z	.7 43.4 44.0 44.5 45.1 .2 43.8 44.4 45.0 45.6
47.0 47.5	24 1 28 2 20 1 3	21 7 22.1 24.2 25.5	36.5 37.5 38.4	39.2 40.0 40.8 4	1.3 42.3 42.7 43	.0 44.6 44.7 42.2 40.1
48.0 48.5	26.3 28.5 30.4	32.0 33.4 34.6 35.8	36.8 37.8 38.7	39.6 40.4 41.2 4: 39.9 40.8 41.6 4:	1.9 42.7 43.4 44 2.3 43.1 43.8 44	.5 45.1 45.8 46.4 47.0
49.0	24 7 20 A 2A 8 2	22 8 22.9 25.2 26.4	37.5 38.5 39.4	40.3 41.2 42.0 4	2.1 49.3 44.Z 44	.7 43.0 40.6 40.7 41.1
49.5 50.0	26.9 29.2 31.1 27.1 29.4 31.3	32.7 34.2 35.3 36.7 33.0 34.4 35.8 37.0	38.1 39.1 40.1	41.0 41.9 42.7 4	3.5 44.3 45.0 45	.3 46.0 46.7 47.3 48.0 .8 46.5 47.1 47.8 48.4

STUMP DOB	0.0 0.2 0.4	0.6 0.8 1.0	1.2 1.4 1.6	HEIGHT (IN	FEET)	2.6 2.8	3.0 3.2	3.4 3.6	3.8 4.0
5.0 5.5	3.6 3.8 4.0 3.9 4.2 4.4	4.1 4.2 4.3 4.5 4.6 4.7	4.4 4.5 4.5	4.6 4.6 5.1 5.1	4.7 4.7 5.2 5.2	4.8 4.8 5.2 5.3	4.8 4.9 5.3 5.3	4.9 4.9 5.4 5.4	4.9 5.0 5.4 5.4
6.0	4.3 4.5 4.8 4.6 4.9 5.1	4.9 5.1 5.2	5.3 5.4 5.4	5.5 5.6	5.6 5.7	5.7 5.8	5.8 5.8	5.9 5.9	5.9 5.9
7.0	5.0 5.3 5.5	5.7 5.9 6.0	6.1 6.2 6.3	6.0 6.0	6.6 6.6	6.2 6.2 6.7 6.7	6.3 6.3 6.8 6.8	6.8 6.9	6.4 6.4 6.9 6.9
7.5 8.0	5.3 5.7 5.9 5.7 6.0 6.3	6.1 6.3 6.4	6.6 6.7 6.8 7.0 7.1 7.2	6.9 6.9 7.3 7.4	7.0 7.1 7.5 7.5	7.1 7.2 7.6 7.7	7.2 7.3 7.7 7.8	7.3 7.4 7.8 7.8	7.4 7.4 7.9 7.9
8.5 9.0	6.0 6.4 6.7 6.4 6.8 7.1	6.9 7.1 7.3 7.3 7.5 7.7	7.4 7.6 7.7 7.9 8.0 8.1	7.8 7.9 8.2 8.3	7.9 8.0	8.1 8.1	8.2 8.2	8.3 8.3	8.4 8.4
9.5	6.7 7.1 7.5	7.7 7.9 8.1	8.3 8.4 8.6	8.7 8.8	8.9 8.9		9.2 9.2	8.8 8.8 9.3 9.3	8.9 8.9 9.4 9.4
10.0 10.5	7.1 7.5 7.8 7.4 7.9 8.2	8.1 8.4 8.6 8.5 8.8 9.0	8.7 8.9 9.0 9.2 9.3 9.5	9.1 9.2 9.6 9.7	9.3 9.4	9.5 9.6 10.0 10.0 1	9.6 9.7 0.1 10.2	9.8 9.8	9.9 9.9
11.0 11.5	7.8 8.2 8.6 8.1 8.6 9.0	8.9 9.2 9.4 9.3 9.6 9.8	9.6 9.8 9.9 10.0 10.2 10.3	10.0 10.1	10.3 10.3	10.4 10.5 1	0.6 10.7	10.7 10.8	10.8 10.9
12.0 12.5	8.4 9.0 9.4	9.7 10.0 10.2	10.4 10.6 10.8	10.9 11.1	11,2 11.3	11.4 11.5 1	1.5 11.6	11.7 11.8	11.8 11.9
13.0	9.1 9.7 10.1	10.1 10.4 10.6	11.3 11.5 11.7	11.8 12.0	12.1 12.2	12.3 12.4 1	2.5 12.6	12.7 12.7	12.8 12.9
13.5 14.0		10.9 11.2 11.5 11.3 11.6 11.9							
14.5 15.0	10.1 10.8 11.3	11.7 12.0 12.3 12.1 12.4 12.7	12.6 12.8 13.0	13.2 13.3	13.5 13.6	13.7 13.8 1	3.9 14.0	14.1 14.2	14.3 14.3
15.5	10.8 11.5 12.0	12.4 12.8 13.1	13.4 13.6 13.9	14.0 14.2	14.4 14.5	14.6 14.8 1	4.9 15.0	15.1 15.2	15.2 15.3
16.0 16.5	11.5 12.2 12.7	12.8 13.2 13.5	14.2 14.5 14.7	14.9 15.1	15.3 15.4	15.6 15.7 1	5.8 15.9	16.0 16.1	16.2 16.3
17.0 17.5	11.8 12.5 13.1	13.6 14.0 14.4 14.0 14.4 14.8	14.7 14.9 15.2 15.1 15.4 15.6	15.4 15.6	15.7 15.9	16.0 16.2 1	6.8 16.9	16.5 16.6 17.0 17.1	16.7 16.8
18.0	12.4 13.2 13.9	14.4 14.8 15.2 14.8 15.2 15.6	15.5 15.8 16.0	16.3 16.5	16.6 16.8	17.0 17.1	7.2 17.4	17.5 17.6	17.7 17.8
19.0	13.1 13.9 14.6	15.1 15.6 16.0	16.3 16.6 16.9	17.1 17.4	17.5 17.7	17.9 18.0 3	8.2 18.3	18.4 18.6	18.7 18.8
19.5 20.0	13.7 14.6 15.3	15.5 16.0 16.4 15.9 16.4 16.8	17.2 17.5 17.8	18.0 18.2	18.5 18.6	18.8 19.0 1	9.1 19.3	19.4 19.5	19.6 19.8
20.5 21.0	14.1 15.0 15.7 14.4 15.3 16.1	16.3 16.8 17.2 16.7 17.2 17.6	17.6 17.9 18.2 18.0 18.3 18.6	18.5 18.7	18.9 19.1	19.3 19.4 1	9.6 19.7	19.9 20.0	20.1 20.2
21.5	14.7 15.7 16.4	17.0 17.6 18.0	18.4 18.7 19.1	19.3 19.6	19.8 20.0	20.2 20.4 2	0.5 20.7	20.8 21.0	21.1 21.2
22.5	15.3 16.3 17.1	17.4 18.0 18.4 17.8 18.3 18.8	19.2 19.6 19.9	20.2 20.5	20.7 20.9	21.1 21.3 2	1.5 21.6	21.8 21.9	22.1 22.2
23.0 23.5	16.0 17.0 17.9	18.2 18.7 19.2 18.5 19.1 19.6	19.6 20.0 20.3 20.0 20.4 20.8	20.6 20.9 21.1 21.3	21.1 21.4 21.6 21.8	21.6 21.8 2	2.0 22.1	22.3 22.4 22.8 22.9	22.6 22.7 23.1 23.2
24.0 24.5	16.3 17.4 18.2	18.9 19.5 20.0 19.3 19.9 20.4	20.5 20.8 21.2	21.5 21.8	22.0 22.3	22.5 22.7 2	2.9 23.1	23.2 23.4	23.5 23.7
25.0 25.5	16.9 18.0 18.9	19.7 20.3 20.8	21.3 21.7 22.0	22.4 22.7	22.9 23.2	23.4 23.6 2	3.8 24.0	24.2 24.4	24.5 24.7
26.0	17.5 18.7 19.6	20.0 20.7 21.2 20.4 21.0 21.6	22.1 22.5 22.9	23.2 23.5	23.8 24.1	24.3 24.6 2	4.8 25.0	25.1 25.3	25.5 25.6
26.5 27.0		20.8 21.4 22.0 21.1 21.8 22.4							
27.5 28.0	18.5 19.7 20.7	21.5 22.2 22.8 21.9 22.6 23.2	23.3 23.7 24.2	24.5 24.9	25.2 25.4	25.7 25.9 2	6.2 26.4	26.6 26.8	26.9 27.1
28.5	19.1 20.4 21.4	22.2 22.9 23.6	24.1 24.6 25.0	25.4 25.7	26.0 26.3	26.6 26.9 2	7.1 27.3	27.5 27.7	27.9 28.1
29.0 29.5	19.7 21.0 22.1	22.6 23.3 24.0 23.0 23.7 24.3	24.9 25.4 25.8	26.2 26.6	26.9 27.2	27.5 27.8 2	8.0 28.3	28.5 28.7	28.9 29.1
30.0 30.5	20.0 21.4 22.4 20.3 21.7 22.8	23.3 24.1 24.7 23.7 24.5 25.1	25.3 25.8 26.3 25.7 26.2 26.7	26.7 27.0 27.1 27.5	27.4 27.7 27.8 28.1	28.0 28.2 2 28.4 28.7 2	18.5 28.7 19.0 29.2	29.0 29.2 29.4 29.6	29.4 29.6
31.0 31.5	20.6 22.0 23.1	24.0 24.8 25.5 24.4 25.2 25.9	26.1 26.6 27.1	27.5 27.9	28.2 28.6	28.9 29.2 2	9.4 29.7	29.9 30.1	30.3 30.5
32.0	21.2 22.7 23.8	24.8 25.6 26.3	26.9 27.4 27.9	28.4 28.8	29.1 29.5	29.8 30.1 3	10.4 30.6	30.9 31.1	31.3 31.5
32.5 33.0	21.8 23.3 24.5	25.1 26.0 26.7 25.5 26.3 27.0	27.7 28.2 28.7	29.2 29.6	30.0 30.4	30.7 31.0 3	11.3 31.5	31.8 32.0	32.3 32.5
33.5 34.0		25.8 26.7 27.4 26.2 27.1 27.8							
34.5 35.0	22.7 24.3 25.5	26.6 27.4 28.2 26.9 27.8 28.6	28.9 29.5 30.0	30.5 30.9	31.3 31.7	32.0 32.4 3	2.7 33.0	33.2 33.5	33.7 34.0
35.5	23.3 24.9 26.2	27.3 28.2 29.0	29.6 30.3 30.8	31.3 31.8	32.2 32.6	32.9 33.3 3	3.6 33.9	34.2 34.4	34.7 34.9
36.0 36.5	23.9 25.5 26.9	27.6 28.5 29.3 28.0 28.9 29.7	30.4 31.1 31.6	32.1 32.6	33.1 33.5	33.8 34.2 3	4.5 34.8	35.1 35.4	35.7 35.9
37.0 37.5		28.3 29.3 30.1 28.7 29.6 30.5							
38.0 38.5	24.7 26.5 27.9	29.0 30.0 30.8 29.4 30.4 31.2	31.6 32.3 32.9	33.4 33.9	34.4 34.8	35.2 35.5 3	5.9 36.2	36.5 36.8	37.1 37.4
39.0	25.3 27.1 28.5	29.7 30.7 31.6	32.4 33.1 33.7	34.2 34.7	35.2 35.7	36.1 36.4 3	6.8 37.1	37.5 37.8	38.1 38.3
39.5 40.0	25.9 27.7 29.2	30.1 31.1 32.0 30.4 31.4 32.3	33.1 33.8 34.5	35.1 35.6	36.1 36.5	37.0 37.3 3	7.7 38.1	38.4 38.7	39.0 39.3
40.5 41.0	26.1 28.0 29.5 26.4 28.3 29.8	30.7 31.8 32.7 31.1 32.2 33.1	33.5 34.2 34.9 33.9 34.6 35.3	35.5 36.0 35.9 36.4	36.5 37.0	37.4 37.8 3 37.8 38.3 3	8.2 38.5	38.9 39.2	39.5 39.8
41.5	26.7 28.6 30.2	31.4 32.5 33.5 31.8 32.9 33.8	34.3 35.0 35.7	36.3 36.9	37.4 37.8	38.3 38.7 3	9.1 39.5	39.8 40.2	40.5 40.8
42.5	27.3 29.2 30.8	32.1 33.2 34.2	35.1 35.8 36.5	37.1 37.7	38.2 38.7	39.2 39.6 4	0.0 40.4	40.8 41.1	41.4 41.8
43.0 43.5		32.5 33.6 34.6 32.8 33.9 34.9							
44.0 44.5	28.1 30.1 31.8	33.1 34.3 35.3 33.5 34.6 35.7	36.2 37.0 37.7	38.4 39.0	39.5 40.0	40.5 41.0 4	1.4 41.8	42.2 42.5	42.9 43.2
45.0 45.5	28.6 30.7 32.4	33.8 35.0 36.0	36.9 37.8 38.5	39.2 39.8	40.4 40.9	41.4 41.8 4	2.3 42.7	43.1 43.5	43.8 44.2
46.0	29.2 31.3 33.0	34.1 35.4 36.4 34.5 35.7 36.8	37.7 38.5 39.3	40.0 40.6	41.2 41.8	42.3 42.7 4	3.2 43.6	44.0 44.4	44.8 45.2
46.5 47.0	29.5 31.6 33.4 29.7 31.9 33.7	34.8 36.1 37.1 35.1 36.4 37.5	38.1 38.9 39.7 38.5 39.3 40.1	40.4 41.0	41.6 42.2 42.1 42.6	42.7 43.2 4	3.6 44.1	44.5 44.9 45.0 45.4	45.3 45.6 45.8 46.1
47.5 48.0	30.0 32.2 34.0	35.5 36.7 37.9 35.8 37.1 38.2	38.8 39.7 40.5	41.2 41.9	42.5 43.0	43.6 44.1 4	4.6 45.0	45.4 45.8	46.2 46.6
48.5 49.0	30.5 32.8 34.6	36.1 37.4 38.6	39.6 40.5 41.3	42.0 42.7	43.3 43.9	44.5 45.0	5.5 45.9	46.4 46.8	47.2 47.6
49.5	31.1 33.4 35.2	36.5 37.8 38.9 36.8 38.1 39.3	40.3 41.2 42.1	42.8 43.5	44.2 44.8	45.3 45.9 4	6.4 46.8	47.3 47.7	48.2 48.6
50.0	31.3 33.7 35.6	37.1 38.5 39.6	40.7 41.6 42.5	43.2 43.9	44.6 45.2	45.8 46.3 4	6.8 47.3	47.8 48.2	48.6 49.0

STUMP								\$1	TUMP +	IE I GH1	r (IN	FEET)									
DOB	0.0	0.2	0.4	0.6	0.8	1.0	1.2	1.4	1.6	1.8	2.0	2.2	2.4	2.6	2.8	3.0	3.2	3.4	3.6	3.8	4.0
5.0	3.5	3.7	3.8	4.0	4.1	4,2	4.3	4.3	4.4	4.5	4.5	4,6	4.6	4.7	4.7	4.8	4.8	4,8	4.9	4.9	4.9
5.5	3.8	4.0	4.2	4.4	4.5	4,6	4.7	4.8	4.9	4.9	5.0	5.1	5.1	5.2	5.2	5.3	5.3	5.3	5.4	5.4	5.4
6.0	4.2	4.4	4.6	4.8	4.9	5.0	5.1	5.2	5.3	5.4	5.5	5.5	5.6	5,6	5.7	5.7	5.8	5.8	5.9	5.9	5.9
6.5 7.0	4.5	4.8 5.2	5.0 5.4	5.2 5.6	5.8	5.5 5.9	5.6	5.7	5.8	5,9 6.3	5.9	6.0	6.1	6.1	6.2	6.2	6.3	6.3	6.3	6.4	6.4
7.5	5.3	5.6	5.8	6.0	6.2	6.3	6.5	6.6	6.7	6.8	6.9	6.5	6.5 7.0	7,1	6.7 7.1	6.7 7.2	6.8 7.2	6.8 7.3	6.8 7.3	6.9 7.4	6.9 7.4
8.0	5.6	6.0	6.2	6.4	6.6	6.8	6.9	7.0	7.1	7.2	7.3	7.4	7.5	7.6	7.6	7.7	7.7	7.8	7.8	7.9	7.9
8.5	6.0	6.3	6.6	6.8	7.0	7.2	7.4	7.5	7.6	7.7	7.8	7.9	8.0	8.0	8.1	8.2	8.2	8.3	8.3	8.4	8.4
9.0 9.5	6.4	6.7	7.0	7.3	7.5	7.6	7.8	7.9	8.1	8.2	8.3	8.4	8.4	8,5	8.6	8.6	8.7	8.8	8.8	8.9	8.9
10.0	6.8 7.1	7.1 7.5	7.4 7.9	7.7 8.1	7.9 8.3	8.1	8.3	8.4	8.5 9.0	8.6 9.1	8.7 9.2	8.8 9.3	8.9 9.4	9.0 9.5	9.1 9.6	9.1 9.6	9.2 9.7	9.3	9.3 9.8	9.4	9.4 9.9
10.5	7.5	7.9	8.3	8.5	8.8	9.0	9.2	9.3	9.4	9.6	9.7	9,8		10.0		10.1		10.2			
11.0	7.9	8.3	8.7	9.0	9.2	9.4	9.6	9.8				10.3	10.4	10.4	10.5	10.6	10.7	10.7	10.8	10.8	
11.5	8.3	8.7	9.1	9.4	9.7							10.7									11.4
12.0 12.5	8.7 9.1	9.1 9.6	9,5	9.8								11.2									
13.0	9.5		10.4									11.7									
13.5	9.9											12.7									
14.0												13.2								13.8	13.9
14.5												13,6								14.3	
15.0 15.5												14.1									
16.0												15.1									
16.5												15.6									16.4
17.0												16.1									
17.5 18.0	13.1	13.7	14.3	14.7	15.1	15.4	15.7	15.9	16.1	16.3	16.4	16.6	16.7	16.8	16.9	17.0	17.1	17.2	17.3	17.3	17.4
18.5	13.9	14.6	15.2	15.6	16.0	16.3	16.6	16.9	17.1	17.3	17.4	17.1 17.6	17.7	17.8	1729	18.0	18.1	18.2	18.3	18.3	18.4
19.0	14.3	15.0	15.6	16.1	16.5	16.8	17.1	17.3	17.6	17.8	17.9	18.1	18.2	18.3	18.4	18.5	18.6	18.7	18.8	18.8	18.9
19.5	14.8	15.5	16.1	16.5	16.9	17.3	17.6	17.8	18.1	18.3	18.4	18.6	18.7	18.8	18.9	19.0	19.1	19.2	19.3	19.3	
20.0	15.2	15.9	16.5	17.0	17.4	17.8	18.1	18.3	18.5	18.7	18.9	19.1	19.2	19.3	19.4	19.5	19.6	19.7	19.8	19.8	19.9
20.5 21.0												19.6									
21.5												20.6									21.4
22.0												21.1									
22.5												21.6									22.4
23.0 23.5												22.1									
24.0	18.6	19.5	20.2	20.5	21.3	21.6	22.0	22.3	22.5	22.8	22.9	22.6	23.3	23.4	23.5	23.6	23.7	23.8	23.8	23.9	23.4
24.5												23.6									
25.0												24.1									24.9
25.5												24.6									
26.0 26.5												25.2 25.7									25.9
27.0												26.2									
27.5												26.7									27.5
28.0												27.2									28.0
28.5 29.0												27.7								28.4	28.5
29.5												28.3									
30.0												29.3									
30.5	24.6	25.7	26.5	27.2	27.7	28.2	28.6	28.9	29.2	29.4	29.7	29.8	30.0	30.1	30.2	30.3	30.4	30.4	30.4	30.5	30.5
31.0	25.1	26.1	27.0	27.7	28.2	28.7	29.1	29.4	29.7	30.0	30.2	30.4	30.5	30.6	30.7	30.8	30.9	30.9	31.0	31.0	31.0
31.5 32.0												30.9									
32.5												31.9									
33.0	27.0	28.1	29.0	29.7	30.3	30.8	31.2	31.6	31.8	32.1	32.3	32.5	32.6	32.7	32.8	32.9	32.9	33.0	33.0	33.0	33.0
33.5	27.5	28.6	29.5	30.2	30.8	31.3	31.7	32.1	32.4	32.6	32.8	33.0	33.1	33.2	33.3	33.4	33.5	33.5	33.5	33.5	33.5

STUMP DOB	0.0	0.2	0.4	0.6	0.8		1.2			IEIGHT		FEET)	2.4	2.6	2.8	3.0	3,2	3.4	3.6	3.8	4.0
5.0 5.5	2.4	2.5	2.7	2.8	2.9 3.2	3.1 3.4	3.2	3.3 3.7	3.5	3.6	3.7	3.8 4.2	3.9 4.3	4.1	4.2	4.3	4.4	4.5	4.6 5.0	4.7 5.1	4.8 5.2
6.0	2.9	3.1	3.2	3.4	3.5	3.7	3.9	4.0	4.2	4.3	4.5	4.6	4.7	4.9	5.0	5.1	5.3	5.4	5.5	5.6	5.7
6.5 7.0	3.2 3.4	3.3 3.6	3.5 3.8	3.7 4.0	3.8	4.0	4.2 4.5	4.4	4.5	4.7 5.0	4.8 5.2	5.0 5.4	5.1 5.5	5.3 5.7	5.4 5.8	5.6 6.0	5.7 6.1	5.8 6.3	6.0 6.4	6.5	6.2
7.5	3.7	3.9	4.1	4.3	4.5	4.7 5.0	4.8 5.2	5.0	5.2	5.4 5.8	5,6	5.8	5.9	6.1	6.3	6.4	6.6	6.7	6.9 7.3	7.0 7.5	7.2 7.6
8.0 8.5	3.9 4.2	4 • 1 4 • 4	4.6	4.5	4.8 5.1	5.3	5.5	5.7	5.6 5.9	6.1	6.3	6.2	6.3	6.9	7.1	7.3	7.5	7.6	7.8	8.0	8.1
9.0 9.5	4.5 4.7	4.7 4.9	4.9 5.2	5.1 5.4	5.4 5.7	5.6 5.9	5.8 6.2	6.1	6.3	6.5	6.7 7.1	6.9 7.3	7.1 7.5	7.3 7.7	7.5 8.0	7.7 8.2	7.9 8.3	8.1	8.3 8.7	8.4 8.9	8.6 9.1
10.0	5.0	5.2	5.5	5.7	6.0	6.3	6.5	6.8	7.0	7.3	7.5	7.7	7.9	8.2	8.4	8.6	8.8	9.0	9.2	9.4	9.6
10.5 11.0	5.2 5.5	5.5 5.8	5.7 6.0	6.0	6.3	6,6	6.8 7.2	7.1 7.5	7.4 7.7	7.6 8.0	7.9 8.3	8.1 8.5	8.3	8.6 9.0	8.8 9.2	9.0 9.5	9.2 9.7		10.1	10.3	10.0
11.5 12.0	5.8 6.0	6.0	6.3	6.6	6.9 7.2	7.2 7.5	7.5 7.9	7.8 8.2	8.1	8.4	9.0	8.9 9.3	9.2	9,4	9.6				10.6		
12.5	6.3	6.6	6.9	7.2	7.6	7.9	8.2	8.5	8.8	9.1	9.4	9.7	10.0	10.2	10.5	10.8	11.0	11.3	11.5	11.7	12.0
13.0 13.5	6.6	6.9 7.2	7.2 7.5	7.5 7.8	7.9 8.2	8.2	8.5	8.9 9.2	9.2 9.5	9.5				10.7							
14.0 14.5	7.1	7.4 7.7	7.8 8.1	8.1	8.5	8.9 9.2	9.2	9.6		10.2											
15.0	7.7	8.0	8.4	8.8	9.1	9.5	9.9	10.3	10.6	11.0	11.3	11.7	12.0	12.3	12.6	12.9	13.2	13.5	13.8	14.1	14.4
15.5 16.0	7.9 8.2	8.3	8.7 9.0	9.1 9.4	9.5	10.2	10.2	10.6	11.0	11.4	11.7	12.1	12.4	12.7	13.1	13.4	13.7	14.4	14.7	14.6	14.8
16.5 17.0	8.5	8.9 9.2	9.3		10.1	10.5	10.9	11.3	11.7	12.1	12.5	12.9	13.2	13.6	13.9	14.3	14.6	14.9	15.2	15.5	15.8
17.5	9.1	9.4	9.9	10.3	10.8	11.2	11.6	12.1	12.5	12.9	13.3	13.7	14.1	14.4	14.8	15.1	15.5	15.8	16.1	16.4	16.8
18.0 18.5	9.3	9.7	10.2	10.6	11.1	11.5	12.0	12.4	12.9	13.3	13.7	14.1	14.5	14.8	15.6	15.6	15.9	16.3	16.6	16.9	17.2 17.7
19.0	9.9	10.3	10.8	11.3	11.7	12.2	12.7	13.2	13.6	14.0	14.5	14.9	15,3	15.7	16.1	16.5	16.8	17.2	17.5	17.9	18.2
19.5 20.0										14.4											
20.5 21.0										15.2 15.6											
21.5	11.3	11.8	12.3	12.9	13.4	13.9	14.5	15.0	15.5	16.0	16.5	16.9	17.4	17.8	18.2	18.7	19.1	19.5	19.9	20.2	20.6
22.0 22.5										16.4											
23.0 23.5	12.2	12.7	13.3	13.8	14.4	15.0	15.5	16.1	16.6	17.1 17.5	17.7	18.1	18.6	19.1	19.6	20.0	20.4	20.9	21.3	21.7	22.1
24.0	12.8	13.3	13.9	14.5	15.1	15.7	16.3	16.8	17.4	17.9	18.5	19.0	19.5	20.0	20.4	20.9	21.3	21.8	22.2	22.6	23.0
24.5 25.0										18.3											
25.5	13.7	14.3	14.9	15.5	16.1	16.7	17.3	17.9	18.5	19,1	19.7	20.2	20.7	21.2	21.7	22.2	22.7	23.2	23.6	24.0	24.5
26.0 26.5										19.5											
27.0 27.5										20.3											
28.0	15.2	15.8	16.5	17.2	17.8	18.5	19.2	19.8	20.5	21.1	21.7	22.3	22.8	23.4	23.9	24.5	25.0	25.5	26.0	26.4	26.9
28.5 29.0	15.9	16.5	17.1	17.8	18.5	19.2	19.9	20.6	21.2	21.5	22.5	23.1	23.7	24.3	24.8	25.4	25.9	26.4	26.9	27.4	27.9
29.5 30.0										22.3											
30.5	16.8	17.4	18.1	18.9	19.6	20.3	21.0	21.7	22.4	23.1	23.7	24.4	25.0	25.6	26.2	26.7	27.3	27.8	28.3	28.8	29.3
31.0 31.5	17.4	18.1	18.8	19.5	20.3	21.0	21.8	22.5	23.2	23.5 23.9	24.6	25.2	25.8	26.4	27.0	27.6	28.2	28.7	29.3	29.8	30.3
32.0 32.5										24.3											
33.0	18.4	19.1	19.8	20.6	21.4	22.1	22.9	23.7	24.4	25.1	25.8	26.5	27.1	27.8	28.4	29.0	29.6	30.1	30.7	31.2	31.7
33.5 34.0	19.0	19.7	20.5	21.3	22.1	22.9	23.7	24.4	25.2	25.5 25.9	26.6	27.3	28.0	28.6	29.3	29.9	30.5	31.1	31.6	32.2	32.7
34.5 35.0	19.4	20.1	20.8	21.6	22.4	23.3	24.0	24.8	25.6	26.3 26.7	27.5	27.7	28.4	29.1	29.7	30.3	30.9	31.5	32.1	32.7	33.2
35.5	20.0	20.7	21.5	22.3	23.2	24.0	24.8	25.6	26.4	27.1	27.9	28.6	29.3	30.0	30.6	31.2	31.9	32.5	33.1	33.6	34.2
36.0 36.5										27.6 28.0											
37.0 37.5										28.4 28.8											
38.0	21.7	22.4	23.3	24.1	25.0	25.9	26.7	27.6	28.4	29.2	30.0	30.7	31.5	32.2	32.9	33.5	34.2	34.8	35.4	36.0	36.6
38.5 39.0	22.0	22.8	23.6	24.5	25.4	26.3	27.1	28.0	28.8	29.6 30.0	30.4	31.2	31.9	32.0	33.3	34.4	34.6	35.8	35.9	37.0	37.1 37.6
39.5 40.0	22.7	23.4	24.3	25.2	26.1	27.0	27.9	28.8	29.6	30.4	31.2	32.0	32.8	33.5	34.2	34.9	35.6	36.2	36.9	37.5	38.1
40.5	23.4	24.1	25.0	25.9	26.9	27,8	28.7	29.6	30.4	30.9 31.3	32.1	32.9	33.7	34.4	35.1	35.8	36.5	37.2	37.8	38.4	39.0
41.0 41.5										31.7 32.1											
42.0	24.4	25.2	26.1	27.0	28.0	28.9	29.9	30.8	31.7	32.5	33.4	34.2	35.0	35.7	36.5	37.2	37.9	38.6	39.2	39.9	40.5
42.5 43.0	25.1	25.9	26.8	27.8	28.7	29.7	30.7	31.6	32.5	33.0 33.4	34.2	35.1	35.9	36.6	37.4	38.1	38.8	39.5	40.2	40.9	41.5
43.5 44.0	25.4 25.8	26.2	27.2	28.1	29.1	30.1	31.1	32.0	32.9	33.8 34.2	34.7 35.1	35.5 35.9	36.3 36.7	37.1 37.5	37.9	38.6 39.1	39.3	40.0	40.7	41.8	42.0
44.5	26.1	27.0	27.9	28.9	29.9	30.9	31.9	32.8	33.7	34.6	35.5	36.4	37.2	38.0	38.8	39.5	40.2	41.0	41.6	42.3	43.0
45.0 45.5										35.1 35.5											
46.0 46.5	27.2	28.0	29.0	30.0	31.0	32.1	33.1	34.0	35.0	35.9 36.3	36.8	37.7	38.5	39.3	40.1	40.9	41.7	42.4	43.1	43.8	44.4
47.0	27.9	28.8	29.7	30.8	31.8	32.9	33.9	34.9	35.8	36.8	37.7	38.6	39.4	40.3	41.1	41.8	42.6	43.3	44.0	44.7	45.4
47.5 48.0										37.2 37.6											
48.5 49.0	29.0	29.9	30.9	31.9	33.0	34.0	35.1	36.1	37.1	38.1 38.5	39.0	39,9	40.8	41.6	42.4	43.2	44.0	44.8	45.5	46.2	46.9
49.5	29.7	30.6	31.6	32.7	33.8	34,8	35.9	36.9	37.9	38.9	39.9	40.8	41.7	42.5	43.4	44.2	45.0	45.7	46.4	47.2	47.9
50.0	30.1	31.0	32.0	33.1	34.2	35,3	36.3	37.4	38.4	39.3	40.3	41.2	42.1	43.0	43.8	44.6	45.4	46.2	46.9	47.6	48.3

STUMP	0.0 0.2 0.4	0 4 0 9 1	ST		(IN FEET) 2.0 2.2	2.4 2.6 2	2.8 3.0 3.	.2 3.4 3.6 3.8 4.0
DOB 5.0	0.0 0.2 0.4 3.5 3.7 3.8		.2 4.2 4.3		4.5 4.6	4.6 4.7	4.7 4.	8 4.8 4.9 4.9 4.9
5.5	3.9 4.1 4.2	4.4 4.5 4	6.6 4.7 4.8 5.0 5.1 5.2		5.0 5.0 5.4 5.5			,3 5.3 5.3 5.4 5.4 ,7 5.8 5.8 5.9 5.9
6.0 6.5	4.6 4.8 5.0	5.1 5.3 5	5.4 5.5 5.6	5.7 5.8	5.9 5.9 6.3 6.4	6.0 6.1	6.1 6.2 6. 6.6 6.6 6.	.2 6.3 6.3 6.4 6.4 .7 6.8 6.8 6.8 6.9
7.0 7.5	4.9 5.2 5.4 5.3 5.5 5.7		5.8 5.9 6.0 5.2 6.4 6.5	6.6 6.7	6.8 6.8	6.9 7.0	7.1 7.1 7.	2 7.2 7.3 7.3 7.4
8.0 8.5	5.6 5.9 6.1 6.0 6.3 6.5		5.6 6.8 6.9 7.1 7.2 7.3	7.0 7.1 7.4 7.6	7.2 7.3			1 8.2 8.3 8.3 8.4
9.0	6.3 6.6 6.9	7.1 7.3 7	7.5 7.6 7.8	7.9 8.0 8.3 8.4	8.1 8.2 8.6 8.7			.6 8.7 8.7 8.8 8.9 .1 9.2 9.2 9.3 9.4
9.5 10.0	6.6 7.0 7.3 7.0 7.3 7.6	7.9 8.1 8	7.9 8.0 8.2 8.3 8.5 8.6	8.8 8.9	9.0 9.1	9.2 9.3	9.4 9.5 9	.6 9.6 9.7 9.8 9.8 .0 10.1 10.2 10.3 10.3
10.5	7.3 7.7 8.0 7.7 8.1 8.4		8.7 8.9 9.0 9.1 9.3 9.5	9.2 9.3	9.4 9.6	10.1 10.2 1	0.3 10.4 10	.5 10.6 10.7 10.8 10.8
11.5	8.0 8.4 8.8	9.0 9.3 9	9.5 9.7 9.9	10 6 10 6 1	A.R 10-9	11.0 11.2 1	1.3 11.4 11	.0 11.1 11.2 11.2 11.3
12.0 12.5	8.4 8.8 9.1 8.7 9.1 9.5	0 0 10 1 10	0 2 10 E 10 7	10.0 11.1 1	11.2 11.4	11.5 11.6 1	1./ 11.5 11	.9 12.0 12.1 12.2 12.3 .4 12.5 12.6 12.7 12.8
13.0 13.5			1 2 11 4 11 6	11 R 12.0 1	17.1 17.3	17.4 12.7 1	Z . 1 1 Z . 0 1 Z	* 4 TO 60 TO 61 TO 62 TO 60
14.0 14.5	9.7 10.2 10.6	11.0 11.3 1	1,6 11.8 12.0	12.2 12.4 1 12.6 12.8	12.0 12.7	13.3 13.5 1	3.6 13.7 13	.8 14.0 14.1 14.2 14.3
15.0	10.4 10.9 11.4	11.8 12.1 17	2,4 12.6 12.9	13.1 13.3	13.5 13.0	14.2 14.4 1	4.5 14.7 14	.8 14.9 15.0 15.1 15.3
15.5 16.0								
16.5 17.0								.7 15.9 16.0 16.1 16.2 .2 16.4 16.5 16.6 16.7 .7 16.8 17.0 17.1 17.2
17.5	12.1 12.7 13.2	13.7 14.1 1	4,4 14.7 15.0	15.2 15.5	15.7 15.9	16.5 16.7 1	6.9 17.0 17	.2 17.3 17.4 17.6 17.7
18.0 18.5			E 2 15 5 15 8	16.1 16.4	10.0	1/40 1/41 1	1 2 2 1 1 0 2 1 1	.6 17.8 17.9 18.1 18.2 .1 18.3 18.4 18.6 18.7 .4 18.7 18.9 19.0 19.2
19.0 19.5			4 0 14 4 14.7	14.9 17.2	17.4 1/./	1 / a 7 1 0 a 1 1	0 4 2 10 4 10	10 1011 1011 1110 1111
20.0	13.8 14.5 15.1	15.6 16.0 1	6.4 16.8 17.1	17.4 17.6	17.9 18.1 18.2 18.6	18.8 19.0 1	9.2 19.4 19	5 19.7 19.9 20.0 20.2
21.0	14.4 15.2 15.8	16.3 16.8 1	7.2 17.6 17.9	18.2 18.5	19.8 19.0	19.7 19.9 2	0.1 20.3 20	0.5 20.7 20.8 21.0 21.1
21.5 22.0			0 ^ 10 4 19 9	10.1 19.4	14.4 14.4	/(lai /Uay /	20.0 21	*** *** *** **** **** ****
22.5 23.0								1.4 21.6 21.8 22.0 22.1 1.9 22.1 22.3 22.4 22.6
23.5	16.1 16.9 17.6	18.2 18.8 1	9.2 19.6 20.0	20.4 20.7	21.0 21.2	21.9 22.2 2	22.4 22.6 22	2.8 23.0 23.2 23.4 23.6
24.0 24.5	16.7 17.6 18.4	19.0 19.5 2	20.0 20.4 20.8	21.2 21.5	29 2 22.6	22.4 22.0 2	23.3 23.6 23	3.8 24.0 24.2 24.4 24.6
25.0 25.5			10 B 21 Z 21 Z	22 A 22.4	22.7 24.0	/11.1 /2.0 /	23.0 24.0 2	103 6702 6701 6712 6714
26.0 26.5	17.7 18.7 19.4	20.1 20.7 2	21.2 21.7 22.1	22.5 22.8	23.6 23.9	24.2 24.5 2	24.7 25.0 2	5.2 25.4 25.6 25.8 26.0
27.0	18.4 19.4 20.2	2 20.9 21.5 2	22.0 22.5 22.9	23.3 23.7	24.0 24.3	25.1 25.4 2	25.6 25.9 2	5.1 26.4 26.6 26.8 27.0
27.5 28.0			10 8 92 2 92.7	74.7 74.7	74.4 73.7	/3.3 /2.0 /		
28.5 29.0				38 A 25.4	25.H 25.1	70.4 /D.I /	C 1 a U C I a 3 C	7.1 27.3 27.6 27.8 28.0 7.6 27.8 28.0 28.3 28.5
29.5	20.0 21.1 22.0	22.7 23.4 2	24.0 24.5 25.0	25.4 25.8	26.6 27.0	27.3 27.7	27.9 28.2 2	8.5 28.8 29.0 29.2 29.5
30.0 30.5	20.7 21.8 22.	7 23.5 24.2 2	24.8 25.3 25.8 25.7 26.2	26.3 20.7	27.1 27.4	28.2 28.6	28.9 29.2 2	9.4 29.7 30.0 30.2 30.4
31.0 31.5								
32.0 32.5								0.4 30.7 30.9 31.2 31.4 0.9 31.1 31.4 31.7 31.9
33.0	22.3 23.5 24.	5 25.3 26.1 2	26.7 27.3 27.9	28.4 28.8	29.2 29.6	30.0 30.4	31.2 31.5 3	1.8 32.1 32.4 32.6 32.9
33.5 34.0	22.9 24.1 25.	2 26.1 26.8	27.5 28.1 28.7	29.2 29.7	30.1 30.3	30.9 31.3	32.1 32.4 3	2.7 33.0 33.3 33.6 33.9
34.5 35.0								
35.5 36.0	23.9 25.1 26.	2 27.2 28.0 2	28,7 29,3 29,9 28,1 28 7 30 3	30.5 30.9	31.8 32.3	32.7 33.1	33.5 33.8 3	4.1 34.5 34.8 35.1 35.3
36.5	24.5 25.8 26.	9 27.9 28.7	29.5 30.1 30.7	31.3 31.8	32.3 32.7	33.6 34.0	34.4 34.7 3	5.1 35.4 35.7 36.0 36.3
37.0 37.5								5.5 35.9 36.2 36.5 36.8 6.0 36.4 36.7 37.0 37.3 6.5 36.8 37.2 37.5 37.8
38.0 38.5								
39.0 39.5	26.1 27.5 28.	7 29.7 30.6	31.4 32.1 32.8	33.4 33.9	34.4 34.7	35.8 36.2	36.6 37.0 3	7.4 37.8 38.1 38.4 38.8
40.0	26.7 28.2 29.	4 30.4 31.3	32.2 32.9 33.6	34.2 34.8	35.7 36.2	36.7 37.1	37.6 38.0 3	8.3 38.7 39.1 39.4 39.7
40.5 41.0								
41.5 42.0								9.3 39.7 40.0 40.4 40.7 99.7 40.1 40.5 40.9 41.2
42.5	28.2 29.8 31.	1 32.2 33.2	34.1 34.9 35.0	36.3 36.9	37.4 38.0	38.9 39.4	39.8 40.3 4	0.7 41.1 41.5 41.8 42.2
43.0 43.5	^ 2 71	0 22 4 2/ 4	24 0 25 7 26 4	. 37.1 47.7	10.1 10.1	1 27.2 27.0	40.00 40.01	1.1 41.5 41.9 42.3 42.7 11.6 42.0 42.4 42.8 43.1
44.0 44.5								
45.0 45.5	29.8 31.4 32.	8 34.0 35.1	36.0 36.8 37.0	38.3 39.0 38.7 39.4	40-0 40-1	5 41.1 41.6	42.1 42.6	3.0 43.4 43.8 44.2 44.6
46.0	30.4 32.1 33.	5 34.7 35.8	36.8 37.6 38.4	39.1 39.8	40.4 41.0	4 42.0 42.5	43.0 43.5	3.9 44.4 44.8 45.2 45.6
46.5 47.0								
47.5 48.0	4 4 4	^ ^4 ^ 37 3	20 2 20 2 40	1 40 B 41.5	47.1 47.	/ 44.4 44.7	**** *** 7	44.9 45.3 45.7 46.2 46.6 45.3 45.8 46.2 46.6 47.0 45.8 46.3 46.7 47.1 47.5
48.5	31.9 33.7 35.	2 36.5 37.6	38.7 39.6 40.	4 41.2 41.9 8 41 6 49.3	42.5 43.	6 44.2 44.7	45.3 45.8	46.3 46.7 47.2 47.6 48.0
49.5								46.7 47.2 47.7 48.1 48.5 47.2 47.7 48.1 48.6 49.0
50.0	32.8 34.7 36.	2 31.0 30.7	3710 4011 4TH	. TEST 7391				_

STUMP												FEET)									
DOB	0.0		0.4				1.2				2.0			2.6						3.8	4.0
5.0 5.5	3.3 3.6	3.4 3.8	3.6 3.9	3.7 4.0	3.8 4.1	3.9 4.3	4.0	4 • 1 4 • 4	4.1	4.6	4.7	4.4	4.4	4.5	5.0	5.1	4.7 5.1	4.7 5.2	4.8 5.2	5.3	4.9 5.4
6.0 6.5	3.9 4.2	4.1	4.2 4.6	4.4	4.5 4.9	4.6 5.0	4.7 5.1	4.8 5.2	4.9 5.3	5.0 5.4	5.1 5.5	5.2 5.6	5.3 5.7	5.4 5.8	5.4 5.9	5.5 6.0	5.6 6.0	5.7 6.1	5.7 6.2	5.8 6.3	5.8 6.3
7.0 7.5	4.5	4.7 5.1	4.9 5.2	5.1 5.4	5.2 5.6	5.4 5.7	5.5 5.9	5.6 6.0	5.7 6.1	5.8 6.2	5.9 6.4	6.1 6.5	6.1	6.2 6.7	6.8	6.4	6.5 7.0	6.6 7.1	6.7 7.1	6.7 7.2	6.8 7.3
8.0	5.1 5.4	5.4	5.6	5.8 6.1	5.9	6.1	6.2	6.4	6.5	6.7 7.1	6.8	6.9 7.3	7.0	7.1 7.5	7.2	7.3	7.4	7.5	7.6	7.7	7.8
9.0	5.7	6.0	6.2	6.4	6.6	6.8	7.0	7.1	7.3	7.5	7.6	7.7	7.9	8.0	8.1	8.2	8.3	8.4	8.6	8.7	8.8
9.5 10.0	6.0	6.6	6.5	6.8 7.1	7.0 7.3	7.2	7.4	7.5 7.9	7.7 8.1	7 · 8 8 · 2	8.4	8.1	8.3	8.4	9.0	9.1	9.2	9.4	9.5	9.6	9.7
10.5 11.0	6.6	6.9 7.2	7.2 7.5	7.4 7.7	7.7 8.0	7.9 8,2	8.1 8.4	8.3 8.6	8.5 8.8	8.6 9.0	8.8 9.2	9.0 9.4	9.1 9.5	9.3 9.7			9.7 10.1	10.3		10.6	10.7
11.5 12.0	7.2 7.4	7.5 7.8	7.8 8.1	8.1 8.4	8.3 8.7	8.6 8.9	8.8 9.2	9.0 9.4	9.2 9.6	9.4 9.8	9.6			10.1							
12.5	7.7	8.1	8.4	8.7 9.0	9.0	9.3	9.5	9.8	10.0	10.2	10.4	10.6	10.8	11.0	11.2	11.3	11.5	11.7	11.8	12.0	12.1
13.5	8.2	8.6	9.0	9.3	9.7	9.9	10.2	10.5	10.7	11.0	11.2	11.4	11.6	11.8	12.0	12.2	12.4	12.6	12.8	12.9	13.1
14.0	8.8	9.2	9.6	10.0	10.3	10.6	10.9	11.2	11.5	11.7	12.0	12.2	12.4	12.7	12.9	13.1	13.3	13.5	13.7	13.9	14.1
15.0 15.5	9.0	9.5 9.7	10.2	10.6	10.9	11.3	11.6	11.9	12.2	12.5	12.7	13.0	13.3	13.1	13.7	14.0	14.2	14.4	14.6	14.8	15.0
16.0 16.5	9.8	10.3	10.7	11.2	11.6	11.9	12.3	12.6	12.9	13.2	13.5	13.8	14.1	13.9	14.6	14.8	15.1	15.3	15.5	15.8	16.0
17.0 17.5	10.0	10.8	11.3	11.8	12.2	12.6	12.9	13.3	13.6	14.0	14.3	14.6	14.9	15.2	15.4	15.7	16.0	16.2	16.5	16.7	16.9
18.0 18.5	10.5	11.1	11.6	12.0	12.5	12.9	13.3	13.6	14.0	14.3	14.7	15.0	15.3	15.6	15.8	16.1	16.4	16.7	16.9	17.2	17.4
19.0	11.0	11.6	12.1	12.6	13.1	13.5	13.9	14.3	14.7	15.1	15.4	15.7	16.1	16.4	16.7	17.0	17.3	17.6	17.8	18.1	18.4
19.5	11.4	12.1	12.6	13.2	13.7	14.1	14.6	15.0	15.4	15.8	16.2	16.5	16.9	17.2	17.5	17.8	18.1	18.4	18.7	19.0	19.3
20.5 21.0	11.7 11.9	12.6	13.2	13.7	14.3	14.7	15.2	15.7	16.1	16.5	16.9	17.3	17.6	18.0	18.3	18.7	19.0	19.3	19.7	20.0	20.3
21.5 22.0	12.1	13.0	13.7	14.3	14.8	15.3	15.8	16.3	16.8	17.2	17.6	18.0	18.4	18.8	19.2	19.5	19.9	20.2	20.6	20.9	21.2
22.5 23.0	12.5	13.3	13.9	14.5	15.1	15.6	16.2	16.6	17.1 17.4	17.6	18.0	18.4	18.8	19.2	19.6	20.0	20.3	20.7	21.5	21.4	21.7
23.5	13.0	13.7	14.4	15.1	15.7	16.2	16.8	17.3	17.8	18.3	18.7	19.2	19.6	20.0	20.4	20.8	21.2	21.6	21.9	22.3	22.6
24.5	13.4 13.6_	14.2	14.9	15.6	16.2	16.8	17.4	17.9	18.4	18.9	19.4	19.9	20.3	20.8	21.2	21.6	22.0	22.4	22.8	23.2	23.6
25.5	13.8	14.6	15.4	16.1	16.8	17.4	18.0	18.6	19.1	19.6	20.1	20.6	21.1	21.6	22.0	22.5	22.9	23.3	23.7	24.1	24.5
26.0 26.5	14.2	15.0	15.8	16.6	17.3	17.9	18.6	19.2	19.8	20.3	20.8	21.4	21.9	22.4	22.8	23.3	23.7	24.2	24.6	25.1	25.5
27.0 27.5	14.3	15.4	16.3	17.1	17.8	18.5	19.2	19.8	20.4	21.0	21.5	22.1	22.6	23.1	23.6	24.1	24.6	25.1	25.5	26.0	26.4
28.0 28.5	14.7	15.6	16.5	17.3	18.1	18,8	19.4	20.1	20.7	21.3	21.9	22.4	23.0	23.5 23.9	24.0	24.5	25.0	25.5	26.0	26.4	26.9
29.0 29.5	15.1	16.0	16.9	17.8	18.6	19.3	20.0	20.7	21.3	22.0	22.6	23.2	23.7	24.3 24.7	24.8	25.4	25.9	26.4	26.9	27.4	27.8
30.0	15.4	16.4	17.4	18.2	19.1	19.8	20.6	21.3	22.0	22.6	23.3	23.9	24.5	25.0 25.4	25.6	26.2	26.7	27.2	27.8	28.3	28.8
30.5 31.0	15.7	16.8	17.8	18.7	19.5	20.4	21.1	21.9	22.6	23.3	23.9	24.6	25.2	25.8	26.4	27.0	27.5	28.1	28.7	29.2	29.7
31.5 32.0	16.1	17.2	18.2	19.1	20.0	20.9	21.7	22.4	23.2	23.9	24.6	25.3	25.9	26.2	27.2	27.8	28.4	29,0	29.5	30.1	30.7
32.5 33.0	16.4	17.5	18.6	19.6	20.5	21.4	22.2	23.0	23.8	24.5	25.3	26.0	26.6	26.9 27.3	28.0	28.6	29.2	29.8	30.4	31.0	31.6
33.5 34.0	16.5	17.7 17.9	18.8	19.8	20.7	21.6	22.5	23.3	24.1	24.8	25.6	26,3	27.0 27.4	27.7 28.0	28.3	29.0	29.6	30.3	30.9	31.5 31.9	32.1 32.5
34.5 35.0	16.8	18.0	19.1	20.2	21.2	22.1	23.0	23.8	24.7	25.5	26.2	27.0	27.7	28.4 28.8	29.1	29.8	30.5	31.1	31.7	32.4	33.0
35.5	17.1	18.3	19.5	20.6	21.6	22,6	23.5	24.4	25.3	26.1	26.9	27.7	28.4	29.2 29.5	29.9	30.6	31.3	32.0	32.6	33.3	33.9
36.0 36.5	17.4	18.7	19.9	21.0	22.0	23.1	24.0	24.9	25.8	26.7	27.5	28.3	29.1	29.9	30.6	31.4	32.1	32.8	33.5	34.2	34.9
37.0 37.5	17.6	19.0	20.2	21.4	22.5	23.5	24.5	25.5	26.4	27.3	28.1	29.0	29.8	30.2 30.6	31.4	32.2	32.9	33.6	34.4	35.1	35.8
38.0 38.5	17.9	19.3	20.5	21.7	22.9	24.0	25.0	26.0	27.0	27.9	28.8	29.6	30.5	31.0	32.1	32.9	33.7	34.5	35.2	36.0	36.7
39.0 39.5	18.1	19.5	20.9	22.1	23.3	24.4	25.5	26.5	27.5	28.5	29.4	30.3	31.2	31.7	32.9	33.7	34.5	35.3	36.1	36.9	37.6
40.0 40.5	18.2	19.7	21.0	22.3	23.5	24.6	25.7	26.8	27.8	28.8	29.7	30.6	31.5	32.4 32.8	33.3	34.1	34.9	35,7	36.5	37.3	38.1
41.0 41.5	18.4	19.9	21.3	22.6	23.9	25.1	26.2	27.3	28.3	29.3	30.3	31.3	32.2	33.1	34.0	34.9	35.7	36.6	37.4	38.2	39.0
42.0	18.6	20.2	21.6	23.0	24.3	25,5	26.6	27.8	28.8	29.9	30.9	.31.9	32.9	33.8	34.7	35.6	36.5	37.4	38.3	39.1	40.0
42.5 43.0	18.8	20.4	21.9	23.3	24.6	25,9	27.1	28.3	29.4	30.5	31.5	32.5	33.5	34.5	35.5	36.4	37.3	38.2	39.1	40.0	40.9
43.5 44.0	19.0	20.6	22.2	23.6	25.0	26.3	27.5	28.7	29.9	31.0	32.1	33.2	34.2	34.9 35.2	36.2	37.2	38.1	39.1	40.0	40.9	41.8
44.5 45.0	19.1	20.8	22.3	23.8	25.2 25.3	26.5 26.7	27.7 28.0	29.0	30.1 30.4	31.3	32.4 32.7	33.5 33.8	34.5 34.8	35.6 35.9	36.6 36.9	37.6 37.9	38.5 38.9	39.5 39.9	40.4	41.8	42.3 42.7
45.5 46.0	19.2	21.0	22.6	24.1	25.5	26.9	28.2	29.4	30.6	31.8	33.0	34.1	35.2 35.5	36.2 36.6	37.3 37.6	38.3 38.7	39.3 39.7	40.3	41.7	42.2	43.2
46.5 47.0	19.4	21.2	22.8	24.4	25.8	27.3	28.6	29.9	31.1	32.4	33.5	34.7	35.8	36.9 37.3	38.0	39.1	40.1	41.1	42.1	43.1	44.1
47.5	19.5	21.4	23.1	24.7	26.2	27,6	29.0	30.3	31.6	32.9	34.1	35.3	36.5	37.6 37.9	38.7	39.8	40.9	41.9	43.0	44.0	45.0
48.0 48.5	19.7	21.5	23.3	24.9	26.5	28.0	29.4	30.8	32.1	33.4	34.7	35.9	37.1	38.3	39.4	40.6	41.7	42.8	43.8	44.9	45.9
49.0 49.5	19.8	21.7	23.5	25.2	26.8	28.3	29.8	31.2	32.6	33.9	35.2	36.5	37.7	38.6	40.1	41.3	42.4	43.6	44.7	45.8	46,9
50.0	19.8	21.8	23.6	25.3	27.0	28,5	30.0	31.4	32.8	34.2	35.5	36,8	38.0	39.3	40.5	41.7	42.8	44.0	45.1	46.2	47.3

		_						ST	IMP HE	EIGHT	ITN F	FFFT									
STUMP DOB	0.0	0.2	0.4	0.6	0.8				1.6				2.4	2.6	2.8	3.0	3.2	3.4	3.6	3.8	4.0
5.0	3.4	3.6	3.7	3.9	4.0	4.1	4.1	4.2	4.3	4.4	4.4	4.5	4.5	4.6	4.6	4.7	4.7		4.8		4.9
5.5	3.8	4.0	4.1	4.2	4.4	4.5	4.6	4.6	4.7	4.8	4.9	4.9 5.4	5.0 5.4	5.1 5.5	5.1 5.6	5.2 5.6	5.2 5.7	5.3 5.7	5.3 5.8	5.4 5.8	5.4 5.9
6.0 6.5	4.1	4.3 4.7	4.5 4.8	4.6 5.0	4.7 5.1	4.9 5.3	5.0 5.4	5.1 5.5	5.1 5.6	5.2 5.7	5.3 5.7	5.8	5.9	6.0	6.0	6.1	6.2	6.2	6.3	6.3	6.4
7.0	4.8	5.0	5.2	5.4	5.5	5.7	5.8	5.9	6.0	6.1	6.2	6.3	6.3	6.4	6.5	6.6 7.0	6.6 7.1	6.7 7.2	6.8 7.2	6.8 7.3	6.9 74
7.5	5.1	5.4 5.7	5.6	5.8 6.1	5.9 6.3	6.1	6.2	6.3	6.4	6.5 7.0	6.6 7.1	6.7 7.2	6.8 7.2	6.9 7.3	7.0 7.4	7.5	7.6	7.6	7.7	7.8	7.8
8.0 8.5	5.5 5.8	6.1	6.3	6.5	6.7	6.9	7.0	7.1	7.3	7.4	7.5	7.6	7.7	7.8	7.9	8.0	8.0	8.1	8.2	8.3	8.3
9.0	6.2	6.4	6.7	6.9	7.1	7.3	7.4 7.8	7.6 8.0	7.7 8.1	7.8 8.2	7.9 8.4	8.0 8.5	8.1 8.6	8.2 8.7	8.3	8.4 8.9	8.5 9.0	9.1	8.7 9.2	8.8 9.2	9.3
9.5 10.0	6.5	6.8 7.1	7.1 7.4	7.3 7.7	7.5 7.9	7.7 8.1	8.2	8.4	8.5	8.7	8.8	8.9	9.0	9.2	9.3	9.4	9.5	9.6	9.6	9.7	9.8
10.5	7.2	7.5	7.8	8.0	8.3	8,5	8.6	8.8	9.0	9.1	9.2 9.7	9.4 9.8	9.5	9.6	9.7	9.8	9,9 10.4	10.0	10.1	.0•2 1 .0•7 1	10.3 10.8
11.0 11.5	7.5 7.8	7.8 8.2	8.1	8.4 8.8	8.6 9.0	8,8 9,2	9.0 9.4	9.2 9.6	9.4	9.5 10.0]	10-1	10.3	10.4	10.5	10.6	10.8	10.9	11.0	11.1	11.2 1	11.3
12.0	8.2	8.5	8.9	9.2	0 4	۸٥	9 9	10.0	10.2	10.4 1	10.6	10.7	10.8	11.0	11.1	11.2	11.3	11.5	11.6	11.7	11.5
12.5	8.5 8.8	8.9 9.2	9.2 9.6	9.5	10 2	10 4	10 7	100	111	11.2	11.4	11.6	11.7	11.9	1Z.O	12.2	12.3	12.4	12.0	12.0 1	1601
13.0 13.5	9.1	~ .			104	1 0	111	112	11 K	11.7	11.9	17.n	17.7	17.5	12.0	12.0	12.0	14.7	1200 .	13.1	2006
14.0	9.5		1 6 7	11 0	112	11 6	11 9	12.1	12.3	12.5	17.7	17.9	19.1	19.6	13.7	13.2	1301	13.4	1-00		
14.5 15.0				/.	,, ,	12 ^	192	12 5	177	13.A	12.2	14-4	19.7	12.1	1207	17.0	1406	14.5	7-0-	14.0	T.4.
15.5	10.5	11.0	11.4	11.8	12.1	12.4	12.7	12.9	13.2	13.4	13.6	13.8	14.4	14.6	14.8	14.9	15.1	15.2	15.4	15.5	15.7
16.0 16.5																					
17.0	/				12 7	12 6	12 0	14.1	14.4	14.7	146.4	1241	12.3	12.2	1.3	13.7	10.0	16.2	10		10.
17.5 18.0			122	12 4	14 0	142	147	15.0	15.2	19.5	15.7	16.0	10.2	10.4	TORO	10.0	1100	4/84	1100	*	1,00
18.5																					
19.0																		18.1			
19.5 20.0		- / -	•		15 5	1 E O	14 2	144	140	17 7	17.5	17.7	184.0	18.2	10.4	10.0	10.0	17.0	1706	1704	1,00
20.5	13.7	14.3	14.9	15.4	15.9	16.3	16.6	17.0	17.3	18.0	17.9	18.2	18.4	19.1	19.3	19.6	19.8	20.0	20.2	20.4	20.6
21.0 21.5																					
22.0	14.6	15.4	16.0	16.5	17.0	17.4	17.8	18.2	18.5	18.9	19.2	19.9	20.2	20.4	20.2	20.9	21.2	21.4	21.6	21.8	22.0
22.5 23.0		11 0	14 7	17 2	177	10 7	10 6	10.0	10 4	19.7	20.0	20.4	70.0	20.7	21.1	4 - 4	41.0	C T 9.7	~~	~~ ~	
23.5		14 /	17 ^	17 4	10 1	19 6	10 0	10.4	19.8	20.1	70.4	20.8	21.1	21.3	21.0	21.7	44.1	46.7	66.0	~~•0	20.0
24.0 24.5		17 0	177		100	10 2	10 R	20.2	20.A	21.0	21.3	21.0	21.7	14.4	44.7	44.0	20.0	22.8	2000	63.1	L
25.0																					
25.5																		24.2			
26.0 26.5			10 1	10 7	20 2	20 0	21 2	21 8	777	27.D	24.D	21.1	/3-1	/ Y . U	2742	27.0	2707	2712	200	23.1	
27.0	17.8	18.7	19.4	20.1	20.7	21.2	21.7	22.2	22.6	23.0	23.4 23.8	24.2	24.6	24.9	25.2	25.5	25.8	26.1	26.4	26.6	26.9
27.5 28.0			1	~ ~ ~		22 2	29 E	22 0	23 4	72 9	24.7	74.6	23 - D	22.3	/2.1	/ D . U	20.3	20.0	20.0	6101	~ ' • ¬
28.5		• • •	20 /		21 0	22 4	23 0	22.4	71.H	76.4	76-1	73.1	/3.4	/3.0	20.1	20.7	20.1	27.0 27.5	2,10	2 1 0	2
29.0 29.5	10 2	20 2	211	21 0	22 5	22 1	22 7	24.2	24.7	25.1	25.5	25.9	20.3	20.1	21.0	21.3	2101	20.0	20.0	20.0	20.0
30.0	19.6		0 1 E		9 2 0	23 E	7/ 1	24 6	25 1	7	25.9	26-4	2 D . 7	//-1	21.3	21.0	20 a l	28.4	2001	~ 7 • 0	
30.5 31.0	19.9																				
31.5	36 5	21 6	22 E		24 A	24 A	25.7	25.8	2 M . 3	20 A N	11.1	7/.0	20.0	40.4	60.0	47.6	6700	4,00	2000	,,,,	20.0
32.0					2/ 7	25 /	24 2	24 5	27 1	27 A	29.A	7 R . S	7 H - 4	77.3	/9./	2U . I	5 () • •	30.8	2101	2107	2100
32.5 33.0	/		22 6	26 2	25 1	25 7	26 4	26 0	27 5	28.O	78.5	7 N . 9	79.4	77.0	30.2	<i>9</i> 0.2	20.7	21.2	21.0	21.02	7606
33.5	21.7	22.8	23.8	24.7	25.4	26.1	26.7	27.3	27.9	28.4	20.3	29.3	30.2	30.2	31.1	31.4	31.8	32.2	32.5	32.9	33.2
34.0 34.5	~ ~ ~	~ ? E	3 / E		26 1	26 8	27 5	2 B . 1	2 R . 7	24.7	79.1	301.7	20 - 7	21.1	2102	2107	2202		22.0	22.4	J J
35.0	22.6	23.8	24.8	25.7	26.5	27.2	27.9	28.5	29.1	29.0	30.1	31.0	31.5	32.0	32.4	32.8	33.2	33.6	34.0	34.3	34.7
35.5 36.0																					
36.5																		34.5 35.0			
37.0 37.5																					
38.0	- /			47 6	1 10 4	. 20 /	20 2	3/ 8	. 21 5	77.1	37.h	77.7	43.7	34.2	34.0	22.1	22.2	35.9 36.4	20.2	2001	2101
38.5 39.0	^	4		20/	20 2	1 20 1	20 9	21.6	. 27.2	47.4	44.5	4444	24.2	93.0	22.2	30.0	20.4		,,,,	J . • .	J - 6 L
39.5			~~ .			20 8		33 0	227	72 7	33 0	74.4	. 45 D	43.3	38.0	20.4	20.7		2101	2006	20.0
40.0					. 20 /	. วา ว	י איני י	27 9	77.4	74.1	44./	47.4	33.8	30.3	20.0	21.2		37.8 38.2	200,	2/11	,,,,
40.5 41.0																					
41.5	26.4	27.8	29.1	30.1	31.1	32.0	32.8	33.5	34.2	34.9	35.9	36.5	37.1	37.7	38.2	38.7	39.2	39.6	40.1	40.5	41.0
42.0 42.5																					
43.0	27.3	28.6	30.0	31.	32.1	33,0	33.9	34.7	35.4	30.1 34.5	35.7	37.4	38.4	39.0	39.5	40.0	40.5	41.0	41.5	42.0	42.4
43.5 44.0			:) JA 6	. 38 /	. ว. ว	26 0	37.A	3 M - 7	, AM.H	1 47.4	97.7	* 4 U • 3	, 4	, 7163	72.0	72.0	76.7
44.5					. . .			1 2K E		. 37 3	3 R . O	1 3×.6	. 44.2	49.0	40.4	40.7	1 1	, 72.0	7617	76.7	72.7
45.0 45.5																		42.4			
46.0					• 2/ '	. 3E .) 2£ 1	27 (1 27 7	7 7 N - 7	49.7		40.		. 11 . /	72.2	, 72.0	, 7367	720,		, , , , .
46.5	29.3	3 30.	9 32.	3 33.	5 34.6	5 35.6	36.5	37.3	3 38.1 7 38 5	38.9	39.0	40.3	3 40.9 7 41.4	41.0	42.6	43.2	43.	7 44.3	44.6	45.3	45.8
47.0 47.5				0 16		2 24 4	2 27 3	9 2 B. '	1 2 S.C	39.7	40.4	41.	41.	42.4	45.6	, 43.0	. ***		7700	, 73.0	, 70.0
48.0	30.	1 31.	8 33.	2 34.	5 35.0	6 36.0	5 37.6	38.	39.3	3 40.1 7 40.5	40.8	41.5	9 42.6	5 43.3	43.9	44	5 45	45.	46.2	46.7	47.3
48.5 49.0					. 74	~ ~ 7 '	2 20 2	י סכי	3 4 0 1	40 9	41.4	47.4	4 44 - 1	444.	44.4	43.	, 45			7102	
49.5					. 2.		7 20 1	7 20 /			43.5	1 47 1	. 47.	1 44 L	44.0	. 42.		, 40.	3 4102	/ • /	70.2
50.0	31.	3 33.	0 34.	4 35.	8 37.	0 38.	U 39.0	J 40 . (J 40.8	41.7	42.4	. 43.	. 43.	, 44.0	. 4206	. +2.	. 731	11.			48.7

STUMP DOB	0.0	0.2	0.4	0.6	0.8	1.0				EIGHT		FEET) 2.2	2.4	2.6	2.8	3.0	3.2	3.4	3,6	3.8	4.0
5.0	3.8	4.0	4.1	4.2	4.3	4.4	4.5	4.5	4.6	4.6	4.7	4.7	4.8	4.8	4.8	4.8	4.9	4.9	4.9	4.9	5.0
5.5 6.0	4.2 4.6	4.4 4.8	4.5 5.0	4.7 5.1	4.8 5.2	4.8 5.3	4.9 5.4	5.0 5.4	5.0 5.5	5.1 5.6	5.1	5.2 5.7	5.2 5.7	5.3 5.7	5.3 5.8	5.3 5.8	5.4 5.8	5.4 5.9	5.4 5.9	5.4 5.9	5.5 5.9
6.5	5.0	5.2	5.4	5.5	5.6	5,7	5.8	5.9	6.0	6.0	6.1	6.1	6.2	6.2	6.3	6.3	6.3	6.4	6.4	6.4	6.4
7.0 7.5	5.4 5.8	5.6	5.8 6.2	5.9 6.4	6.1	6.2	6.3 6.7	6.8	6.4	6.9	6.5 7.0	6.6 7.1	6.7 7.1	6.7 7.2	6.7 7.2	6.8 7.3	6.8 7.3	6.8 7.3	6.9 7.4	6.9 7.4	6.9 7.4
8.0	6.1	6.4	6.6	6.8	6.9	7.0	7.2	7.2	7.3	7.4	7.5	7.5	7.6	7.7	7.7	7.7	7.8	7.8	7.9	7.9	7.9
8.5 9.0	6.5 6.9	6.8 7.2	7.0 7.4	7.2 7.6	7.4 7.8	7.5 7.9	7.6 8.0	7.7 8.2	7.8 8.2	7.9 8.3	7.9 8.4	8.0 8.5	8.1	8.1	8.2 8.7	8.2 8.7	8.3	8.3 8.8	8.4 8.8	8.4 8.9	8.4 8.9
9.5	7.3	7.6	7.8	8.0	8.2	8.4	8.5	8.6	8.7	8.8	8.9	9.0	9.0	9.1	9.1	9.2	9.2	9.3	9.3	9.4	9.4
10.0	7.7	8.0 8.4	8.3	8.5	8.6 9.1	8.8 9.2	8.9 9.4	9.1 9.5	9.2	9.3 9.7	9.3 9.8	9.4 9.9	9.5	9.6	9.6	9.7	9.7	9.8	9.8	9.9	9.9
10.5 11.0	8.1 8.4	8.8	9.1	9.3	9.5	9.7	9.8	10.0	10.1	10.2	10.3	10.4	10.4	10.5	10.6	10.6	10.7	10.8	10.8	10.9	10.9
11.5	8.8	9.2	9.5	9.7								10.8									
12.0 12.5	9.2 9.6	9.6	10.3	10.6	10.8	11.0	11.2	11.3	11.5	11.6	11.7	11.8	11.9	12.0	12.0	12.1	12.2	12.2	12.3	12.3	12.4
13.0	10.0	10.4	10.7	11.0	11.2	11.4	11.6	11.8	11.9	12.0	12.1	12.3	12.3	12.4	12.5	12.6	12.7	12.7	12.8	12.8	12.9
13.5 14.0	10.7	11.2	11.5	11.8	12.1	12.3	12.5	12.7	12.8	13.0	13.1	13.2	13.3	13.4	13.5	13.6	13.6	13.7	13.8	13.8	13.9
14.5	11.1	11.6	12.0	12.3	12.5	12.8	13.0	13.1	13.3	13.4	13.5	13.7 14.1	13.8	13.9	14.0	14.0	14.1	14.2	14.2	14.3	14.4
15.0 15.5	11.9	12.4	12.8	13.1	13.4	13.6	13.8	14.0	14.2	14.3	14.5	14.6	14.7	14.8	14.9	15.0	15.1	15.2	15.2	15.3	15.4
16.0	12.3	12.8	13.2	13.5	13.8	14.1	14.3	14.5	14.7	14.8	14.9	15.1 15.5	15.2	15.3	15.4	15.5	15.6	15.6	15.7	15.8	15.9
16.5 17.0	13.0	13.6	14.0	14.4	14.7	15.0	15.2	15.4	15.6	15.7	15.9	16.0	16.1	16.3	16.4	16.5	16.5	16.6	16.7	16.8	16.8
17.5	13.4	14.0	14.4	14.8	15.1	15.4	15.6	15.8	16.0	16.2	16.3	16.5 17.0	16.6	16.7	16.8	16.9	17.0	17.1	17.2	17.8	17.3
18.0 18.5	14.2	14.8	15.2	15.6	16.0	16.3	16.5	16.7	16.9	17.1	17.3	17.4	17.6	17.7	17.8	17.9	18.0	18.1	18.2	18.3	18.3
19.0	14.5	15.2	15.7	16.1	16.4	16.7	17.0	17.2	17.4	17.6	17.7	17.9 18.4	18.0	18.2	18.3	18.4	18.5	18.6	18.7	18.7	18.8
19.5 20.0	15.3	16.0	16.5	16.9	17.3	17.6	17.9	18.1	18.3	18.5	18.7	18.8	19.0	19.1	19.2	19.4	19.5	19.6	19.6	19.7	19.8
20.5	15.7	16.4	16.9	17.3	17.7	18.0	18.3	18.6	18.8	19.0	19.1	19.3 19.8	19.5	19.6	19.7	19.8	19.9	20.0	20.1	20.2	20.3
21.0 21.5	16.5	17.2	17.7	18.2	18.6	18.9	19.2	19.5	19.7	19.9	20.1	20.2	20.4	20.5	20.7	20.8	20.9	21.0	21.1	21.2	21.3
22.0	16.8	17.5	18.1	18.6	19.0	19.3	19.6	19.9	20.1	20.4	20.5	20.7	20.9	21.0	21.2	21.3	21.4	21.5	21.6	21.7	21.8
22.5 23.0	17.6	18.3	18.9	19.4	19.9	20.2	20.5	20.8	21.1	21.3	21.5	21.2	21.8	22.0	22.1	22.3	22.4	22.5	22.6	22.7	22.8
23.5	18.0	18.7	19.4	19.9	20.3	20.7	21.0	21.3	21.5	21.7	21.9	22.1	22.3	22.5	22.6	22.7	22.9	23.0	23.1	23.2	23.3
24.0 24.5	18.7	19.5	20.2	20.7	21.1	21.5	21.9	22.2	22.4	22.7	22.9	23.1	23.2	23.4	23.6	23.7	23.8	24.0	24.1	24.2	24.3
25.0	19.1	-19.9	20.6	21.1	21.6	22.0	22.3	22.6	22.9	23.1	23.3	23.5 24.0	23.7	23.9	24.0	24.2	24.3	24.4	24.6	24.7	24.8
25.5 26.0	19.9	20.7	21.4	22.0	22.4	22.8	23.2	23.5	23.8	24.0	24.3	24.5	24.7	24.8	25.0	25.2	25.3	25.4	25.5	25.7	25.8
26.5 27.0	20.3	21.1	21.8	22.4	22.9	23.3	23.6	24.0	24.2	24.5	24.7	24.9 25.4	25.1	25.3	25.5	25.6	25.8	25.9	26.0	26.1	26.3
27.5	21.0	21.9	22.6	23.2	23.7	24.2	24.5	24.9	25.2	25.4	25.7	25.9	26.1	26.3	26.4	26.6	26.7	26.9	27.0	27.1	27.2
28.0 28.5	21.4	22.3	23.0	23.6	24.2	24.6	25.0	25.8	25.6	25.9	26.1	26.4	25.6	26.8	26.9	27.1	27.7	27.4	27.5	27.6	27.7
29.0	22.2	23.1	23.9	24.5	25.0	25.5	25.9	26.2	26.5	26.8	27.1	27.3	27.5	27.7	27.9	28.1	28.2	28.3	28.5	28.6	28.7
29.5 30.0	22.5	23.5	24.3	24.9	25.4	25.9	26.3	26.7	27.0	27.7	27.5	27.8 28.2	28.5	28.2	28.4	28.5	28.7	28.8	29.0	29.1	29.2
30.5	23.3	24.3	25.1	25.7	26.3	26.8	27.2	27.6	27.9	28.2	28.5	28.7	28.9	29.1	29.3	29.5	29.7	29.8	30.0	30.1	30.2
31.0 31.5	23.7	24.7	25.5	26.2	26.7	27.2	27.6	28.0	28.4	28.7	28.9	29.2 29.6	29.4	30.1	29.8	30.0	30.1	30.8	30.4	30.6	30.7
32.0	24.4	25.5	26.3	27.0	27.6	28.1	28.5	28.9	29.3	29.6	29.9	30.1	30.3	30.6	30.8	30.9	31.1	31.3	31.4	31.6	31.7
32.5 33.0												30.6 31.1									
33.5	25.6	26.7	27.5	28.3	28.9	29.4	29.9	30.3	30.6	31.0	31.3	31.5	31.8	32.0	32.2	32.4	32.6	32.7	32.9	33.0	33.2
34.0 34.5	26.0	27.5	28.0	28.7	29.3	30.3	30.8	30.7	31.1	31.4	32.2	32.0 32.5	32.7	32.9	33.2	33.4	33.5	33.7	33.9	34.0	34.2
35.0	26.7	27.9	28.8	29.5	30.2	30.7	31.2	31.6	32.0	32.3	32.6	32.9	33.2	33.4	33.6	33.8	34.0	34.2	34.4	34.5	34.7
35.5 36.0	27.1	28.3	29.6	30.4	31.0	31.6	32.1	32.5	32.9	33.3	33.6	33.4 33.9	34.1	34.4	34.6	34.8	35.0	35.2	35.4	35.5	35.7
36.5	27.9	29.0	30.0	30.8	31.5	32.0	32.5	33.0	33.4	33.7	34.0	34.3 34.8	34.6	34.9	35.1	35.3	35.5	35.7	35.8	36.0	36.2
37.0 37.5	28.6	29.8	30.8	31.6	32.3	32.9	33.4	33.9	34.3	34.6	35.0	35,3	35.6	35.8	36.0	36.3	36.5	36.6	36.8	37.0	37.1
38.0	29.0	30.2	31.2	32.0	32.7	33,3	33.9	34.3	34.7	35.1	35.4	35.7	36.0	36.3	36.5	36.7	36.9	37.1	37.3	37.5	37.6
38.5 39.0	29.8	31.0	32.0	32.9	33.6	34.2	34.7	35.2	35.6	36.0	36.4	36.2 36.7	37.0	37.2	37.5	37.7	37.9	38.1	38.3	38.5	38.6
39.5	30.1	31.4	32.4	33.3	34.0	34.6	35.2	35.7	36.1	36.5	36.8	37.2 37.6	37.4	37.7	38.0	38.2	38.4	38.6	38.8	39.0	39.1
40.0 40.5	30.9	32.2	33.3	34.1	34.9	35,5	36.1	36.6	37.0	37.4	37.8	38.1	38.4	38.7	38.9	39.2	39.4	39.6	39.8	39.9	40.1
41.0 41.5	31.3	32.6	33.7	34.6	35.3	36.0	36.5	37.0	37.5	37.9	38.2	38.6 39.0	38.9	39.1	39.4	39.6	39.9	40.1	40.3	40.4	40.6
42.0	32.0	33.4	34.5	35.4	36.2	36.8	37.4	37.9	38.4	38.8	39.2	39.5	39.8	40.1	40.4	40.6	40.8	41.0	41.2	41.4	41.6
42.5 43.0	32.4	33.8	34.9	35.8	36.6	37.3	37.8	38.4	38.8	39.2	39.6	40.0 40.4	40.3	40.6	40.8	41.1	41.8	42.0	41.7	41.9	42.1
43.5	33.2	34.6	35.7	36.7	37.4	38.1	38.7	39.3	39.7	40.2	40.5	40.9	41.2	41.5	41.8	42.0	42.3	42.5	42.7	42.9	43.1
44.0	33.5	35.0	36.1	37.1	37.9	38,6	39.2	39.7	40.2	40.6	41.0	41.4	41.7	42.0	42.3	42.5	42.8	43.5	43.2	43.4	43.6
44.5 45.0	34.3	35.8	36.9	37.9	38.7	39.4	40.1	40.6	41.1	41.5	41.9	42.3	42.6	42.9	43.2	43.5	43.7	44.0	44.2	44.4	44.6
45.5 46.0	34.7	36.2	37.3	38.3	39.2	39.9	40.5	41.1	41.6	42.0	42.4	42.8	43.1	43.4	43.7	44.0	44.2	44.5	44.7	44.9	45.1
46.5	35.4	36.9	38.2	39.2	40.0	40.8	41.4	42.0	42.5	42.9	43.3	43.7	44.1	44.4	44.7	44.9	45.2	45.4	45.7	45.9	46.1
47.0 47.5	35.8	37.3	38.6	39.6	40.4	41.2	41.8	42.4	42.9	43.4	43.8	44•2 44•6	44.5	44.8	45.1	45.4	45.7	45.9	46.1	46.4	46.6
48.0	36.6	38.1	39.4	40.4	41.3	42.1	42.7	43.3	43.8	44.3	44.7	45.1	45.5	45.8	46.1	46.4	46.6	46.9	47.1	47.3	47.5
48.5 49.0	36.9	38.5	39.8	40.8	41.7	42.5	43.2	43.8	44.3	44.8	45.2	45.6 46.1	45.9	46.3	46.6	46.9	47.1	47.4	47.6	47.8	48.0
49.5	37.7	39.3	40.6	41.7	42.6	43.4	44.0	44.7	45.2	45.7	46.1	46.5	46.9	47.2	47.5	47.8	48.1	48.4	48.6	48.8	49.0
50.0	38.1	39.7	41.0	42.1	43.0	43.8	44.5	45.1	45.6	46.1	46.6	47.0	47.4	47.7	48.0	48.3	48.6	48.8	47.1	44.3	49.5

STUMP DOB	0.0 0.2 0.	4 0.6 0.8 1.	STUMP	HEIGHT (IN	FEET) 2.2 2.4 2.	6 2.8 3.0	3.2 3.4	3.6 3.8 4.0
5.0 5.5 6.0 6.5	3.8 4.0 4. 4.1 4.4 4. 4.5 4.8 5. 4.9 5.2 5.	6 4.7 4.9 5. 0 5.2 5.3 5.	0 5.1 5.1 5. 4 5.5 5.6 5.	2 5.2 5.3 6 5.7 5.7	4.8 4.9 4. 5.3 5.3 5. 5.8 5.8 5. 6.3 6.3 6.	4 5.4 5.4 9 5.9 5.9	4.9 5.0 5.4 5.4 5.9 5.9 6.4 6.4	5.0 5.0 5.0 5.5 5.5 5.5 6.0 6.0 6.0 6.4 6.5 6.5
7.0 7.5 8.0	5.2 5.6 5. 5.6 6.0 6. 6.0 6.3 6.	8 6.0 6.2 6. 2 6.4 6.6 6.	3 6.4 6.5 6. 7 6.9 7.0 7.	6 6.6 6.7	6.7 6.8 6. 7.2 7.3 7. 7.7 7.7 7.	8 6.9 6.9 3 7.3 7.4	6.9 6.9 7.4 7.4 7.9 7.9	6.9 7.0 7.0 7.4 7.5 7.5 7.9 8.0 8.0
8.5 9.0 9.5	6.3 6.7 7. 6.7 7.1 7. 7.0 7.5 7.	0 7.3 7.5 7. 4 7.7 7.9 8.	6 7.7 7.9 8. 1 8.2 8.3 8.	0 8.0 8.1 4 8.5 8.6	8.2 8.2 8. 8.6 8.7 8. 9.1 9.2 9.	3 8.3 8.3 7 8.8 8.8	8.4 8.4 8.9 8.9 9.3 9.4	8.4 8.4 8.5 8.9 8.9 9.0 9.4 9.4 9.5
10.0 10.5 11.0	7.4 7.9 8. 7.8 8.2 8. 8.1 8.6 9.	2 8.5 8.7 8. 6 8.9 9.2 9.	9 9.1 9.2 9.	3 9.4 9.5 8 9.9 10.0	9.6 9.6 9. 10.1 10.1 10.	7 9.8 9.8 2 10.2 10.3	9.8 9.9 10.3 10.4	9.9 9.9 10.0 10.4 10.4 10.4
11.5 12.0 12.5	8.5 9.0 9. 8.8 9.4 9.		2 10.4 10.6 10.6 10.6 10.8 11.0 11.	7 10.8 10.9	11.0 11.1 11.11.5 11.5	1 11.2 11.2 6 11.7 11.7	11.3 11.3 11.8	11.4 11.4 11.4 11.9 11.9 11.9
13.0 13.5 14.0	9.5 10.1 10. 9.8 10.5 11.	6 11.0 11.3 11. 0 11.4 11.7 11. 4 11.8 12.1 12.	5 11.7 11.9 12. 9 12.1 12.3 12.	0 12.2 12.3 5 12.6 12.8	12.4 12.5 12.12.9 13.0 13.	6 12.6 12.7 0 13.1 13.2	12.8 12.8 13.2 13.3	12.8 12.9 12.9 13.3 13.4 13.4
14.5 15.0 15.5	10.5 11.2 11. 10.9 11.6 12.	7 12.2 12.5 12. 1 12.6 12.9 13. 5 13.0 13.3 13.	8 13.0 13.2 13. 2 13.4 13.7 13.	4 13.5 13.7 8 14.0 14.1	13.8 13.9 14. 14.3 14.4 14.	0 14.1 14.1 5 14.5 14.6	14.2 14.3 14.7 14.7	14.3 14.4 14.4 14.8 14.9 14.9
16.0 16.5 17.0	11.9 12.7 13. 12.2 13.0 13.	9 13.3 13.7 14. 3 13.7 14.1 14. 6 14.1 14.5 14.	5 14.7 15.0 15.9 15.2 15.4 15.	2 15.3 15.5 6 15.8 16.0	15.6 15.8 15. 16.1 16.2 16.	9 16.0 16.1 3 16.4 16.5	16.1 16.2 16.6 16.7	16.3 16.3 16.4 16.8 16.8 16.9
17.5 18.0 18.5	12.9 13.7 14. 13.2 14.1 14.	0 14.5 14.9 15. 4 14.9 15.3 15. 8 15.3 15.8 16.	7 16.0 16.3 16. 1 16.4 16.7 16.	5 16.7 16.9 9 17.1 17.3	17.0 17.2 17. 17.5 17.6 17.	3 1744 17.5 7 1749 18.0	17.6 17.7 18.1 18.1	17.7 17.8 17.9 18.2 18.3 18.4
19.0 19.5 20.0	13.9 14.8 15. 14.2 15.1 15.	1 15.7 16.2 16.5 16.1 16.6 16.9 16.5 17.0 17.	9 17.3 17.6 17. 4 17.7 18.0 18.	8 18.0 18.2 2 18.5 18.7	18.4 18.5 18. 18.8 19.0 19.	7 18.8 18.9 1 19.3 19.4	19.0 19.1 19.5 19.6	19.2 19.3 19.3 19.7 19.8 19.8
20.5 21.0 21.5	14.8 15.8 16. 15.1 16.2 17.	2 16.9 17.3 17.6 17.2 17.7 18.0 17.6 18.1 18.	2 18.5 18.8 19.6 19.0 19.3 19.	1 19.4 19.6 6 19.8 20.0	19.8 19.9 20.20.2 20.4 20.	1 20.2 20.3 5 20.7 20.8	20.4 20.6 20.9 21.0	20.6 20.7 20.8 21.1 21.2 21.3
22.0 22.5 23.0	15.8 16.9 17. 16.1 17.2 18.	3 18.0 18.5 19.7 18.4 18.9 19.1 18.7 19.3 19.	4 19.8 20.1 20.8 20.2 20.5 20.	.4 20.7 20.9 .8 21.1 21.3	21.1 21.3 21.21.6 21.8 21.	5 21.6 21.7 9 22.1 22.2	21.9 22.0 22.4 22.5	22.1 22.2 22.3 22.6 22.7 22.8
23.5 24.0 24.5 25.0	16.7 17.9 18. 17.0 18.2 19.	4 19.1 19.7 20.8 19.5 20.1 20.1 19.9 20.5 21.5 20.2 20.9 21.	6 21.0 21.4 21.0 21.4 21.8 22.	7 22.0 22.2	22.5 22.7 22.22.9 23.1 23.	8 23.0 23.2 3 23.5 23.6	23.3 23.4 23.8 23.9	23.6 23.7 23.8 24.0 24.1 24.3
25.5 26.0 26.5	17.6 18.9 19. 17.9 19.2 20.	8 20.6 21.3 21. 2 21.0 21.6 22. 5 21.3 22.0 22.	8 22.2 22.6 23. 2 22.6 23.1 23.	0 23.3 23.6	23.8 24.0 24.2 24.2 24.5 24.	2 24.4 24.6 7 24.9 25.0	24.7 24.9 25.2 25.3	25.0 25.1 25.2 25.5 25.6 25.7
27.0 27.5 28.0	18.5 19.9 20. 18.8 20.2 21.	9 21.7 22.4 23. 2 22.1 22.8 23. 6 22.4 23.2 23.	0 23.5 23.9 24. 4 23.9 24.3 24.	.3 24.6 24.9 .7 25.0 25.3	25.1 25.4 25. 25.6 25.8 26.	6 25.8 26.0 0 26.3 26.4	26.1 26.3 26.6 26.8	26.4 26.6 26.7 26.9 27.1 27.2
28.5 29.0 29.5	19.4 20.8 21. 19.7 21.2 22.	9 22.8 23.5 24. 3 23.2 23.9 24. 6 23.5 24.3 24.	1 24.7 25.1 25.5 5 25.1 25.5 25.1 25.5 25.1	.5 25.9 26.2 .9 26.3 26.6	26.5 26.7 27.2 26.9 27.2 27.	0 27.2 27.4 4 27.6 27.8	27.6 27.7 28.0 28.2	27.9 28.0 28.2 28.4 28.5 28.7
30.0 30.5 31.0	20.6 22.1 23. 20.9 22.4 23.	0 23.9 24.7 25.3 24.2 25.0 25.6 24.6 25.4 26.	7 26.3 26.7 27 1 26.6 27.2 27	.2 27.6 27.9 .6 28.0 28.3	28.2 28.5 28.28.7 29.0 29.0	8 29.0 29.2 2 29.5 29.7	29.4 29.6 29.9 30.1	29.8 30.0 30.1 30.3 30.5 30.6
31.5 32.0 32.5	21.5 23.1 24. 21.8 23.4 24.	0 24.9 25.8 26.3 25.3 26.1 26.6 25.7 26.5 27.	8 27.4 28.0 28. 2 27.8 28.4 28.	.4 28.8 29.2 .8 29.3 29.6	29.5 29.8 30.	1 30.4 30.6 6 30.8 31.1	30.8 31.0 31.3 31.5	31.2 31.4 31.6 31.7 31.9 32.1
33.5 34.0	22.3 24.0 25. 22.6 24.3 25.	0 26.0 26.9 27.3 26.3 27.2 28.6 26.7 27.6 28.	0 28.6 29.2 29. 3 29.0 29.6 30	.7 30.1 30.5 .1 30.5 30.9	30.8 31.2 31. 31.3 31.6 31.	5 31.7 32.0 9 32.2 32.5	32.2 32.5 32.7 32.9	32.7 32.9 33.1 33.2 33.4 33.6
34.5 35.0 35.5	23.2 24.9 26. 23.4 25.2 26.	9 27.0 27.9 28.3 27.4 28.3 29.6 27.7 28.7 29.	1 29.8 30.4 30.5 30.1 30.7 31	.9 31.3 31.8 .3 31.8 32.2	32.1 32.5 32. 32.6 32.9 33.	8 33.1 33.4 2 33.6 33.8	33.6 33.9 34.1 34.3	34.1 34.3 34.5 34.6 34.8 35.0
36.0 36.5 37.0 37.5	24.0 25.8 27. 24.2 26.1 27.	9 28.1 29.0 29.2 28.4 29.4 30.6 28.7 29.7 30.	2 30.9 31.5 32 6 31.3 31.9 32	.1 32.6 33.0 .5 33.0 33.4	33.4 33.8 34. 33.9 34.2 34.	1 34.5 34.7 6 34.9 35.2	35.0 35.3 35.5 35.8	35.5 35.8 36.0 36.0 36.2 36.5
38.0 38.5 39.0	24.8 26.7 28. 25.0 27.0 28.	5 29.8 30.8 31.	3 32.1 32.7 33. 7 32.4 33.1 33	.3 33.8 34.3 .7 34.2 34.7	34.7 35.1 35. 35.1 35.5 35.	5 35.8 36.1 9 36.2 36.6	36.4 36.7 36.9 37.2	37.0 37.2 37.4
39.5 40.0 40.5	25.6 27.6 29. 25.8 27.9 29.	1 30.4 31.5 32. 5 30.8 31.8 32.	4 33.2 33.9 34 8 33.6 34.3 34	.5 35.0 35.5 .9 35.4 35.9	36.0 36.4 36. 36.4 36.8 37.	8 37.1 37.5 2 37.6 37.9	37.8 38.1 38.3 38.6	38.4 38.6 38.9
41.0 41.5 42.0	26.4 28.4 30. 26.6 28.7 30.	1 31.4 32.5 33. 4 31.7 32.9 33.	5 34.3 35.0 35. 8 34.7 35.4 36	.7 36.2 36.8 .1 36.6 37.2	37.2 37.7 38. 37.7 38.1 38.	1 38.5 38.8 5 38.9 39.3	39.2 39.5 39.6 40.0	39.8 40.1 40.4 40.3 40.6 40.8 40.7 41.0 41.3
42.5 43.0 43.5	27.1 29.3 31. 27.4 29.6 31.	0 32.4 33.6 34. 3 32.7 33.9 34.	5 35.4 36.2 36 9 35.8 36.5 37	.8 37.5 38.0 .2 37.9 38.4	38.5 39.0 39. 38.9 39.4 39.	4 39.8 40.2 8 40.3 40.6	40.5 40.9	41.2 41.5 41.8 41.7 42.0 42.3 42.2 42.5 42.8
44.0 44.5 45.0	27.9 30.1 31. 28.1 30.4 32.	9 33.3 34.6 35	6 36.5 37.3 38 0 36.9 37.7 38	.0 38.6 39.2 .4 3 9. 0 39.6	39.8 40.3 40. 40.2 40.7 41.	7 41.1 41.5	41.9 42.3 42.4 42.7	42.6 43.0 43.3 43.1 43.4 43.7
45.5 46.0 46.5	28.6 30.9 32. 28.8 31.2 33. 29.1 31.5 33.	.8 34.3 35.6 36. 1 34.6 35.9 37. 4 34.9 36.2 37.	6 37.6 38.4 39 0 38.0 38.8 39 3 38.3 39.2 39	.2 39.8 40.4 .5 40.2 40.9 .9 40.6 41.3	41.0 41.5 42. 41.4 41.9 42. 41.8 42.4 42.	0 42.5 42.9 4 42.9 43.3 9 43.3 43.8	43.3 43.7 43.7 44.1 44.2 44.6	44.0 44.4 44.7 44.5 44.9 45.2 45.0 45.3 45.7
47.0 47.5 48.0	29.6 32.0 34. 29.8 32.3 34.	0 35.5 36.9 38. 2 35.9 37.2 38.	0 39.0 39.9 40 4 39.4 40.3 41	.7 41.4 42.1 .1 41.8 42.5	42.7 43.2 43.43.1 43.6 44.	7 44.2 44.7 2 44.7 45.1	45.1 45.5 45.6 46.0	45.4 45.8 46.2 45.9 46.3 46.6 46.4 46.8 47.1
48.5 49.0 49.5 5 0.0	30.3 32.8 34. 30.5 33.1 35.	8 36.5 37.9 39 1 36.8 38.2 39	0 40.1 41.0 41 4 40.4 41.4 42	.8 42.6 43.3 .2 43.0 43.7	43.9 44.5 45.	0 45.5 46.0 4 46.0 46.4	46.5 46.9 46.9 47.4	46.8 47.2 47.6 47.3 47.7 48.1 47.8 48.2 48.6 48.2 48.7 49.1

STUMP DOB	0.0	0.2	0.4	0.6	0.8	1.0				1 E I GHT				2.6	2.8	3.0	3.2	3.4	3.6	3.8	4.0
5.0	2.9	3.1	3.3	3.5	3.7	3.8	3.9	4.0	4 • 1	4.2	4.3	4.4	4.4	4.5	4.6	4.6	4.7	4.7	4.8	4.8	4.9
5.5 6.0	3.2 3.5	3.5 3.8	3.7 4.0	3.9 4.2	4.0	4.2	4.3	4.4	4.5	4.6 5.1	4.7 5.2	4.8 5.2	4.9 5.3	5.0 5.4	5.0 5.5	5.1 5.6	5.2 5.6	5.2 5.7	5.3 5.8	5.3 5.8	5.4 5.9
6.5	3.8	4.1	4.3	4.6	4.8	4.9	5.1	5.2	5.4	5.5	5.6	5.7	5.8	5.9	5.9	6.0	6.1	6.2	6.2	6.3	6.4
7.0 7.5	4.1	4.4	4.7 5.0	4.9 5.3	5.1 5.5	5.3 5.7	5.5 5.9	5.6 6.0	5.8	5.9 6.3	6.0	6.1	6.2	6.8	6.4	6.5 7.0	6.6 7.0	6.6 7.1	6.7 7.2	6.8 7.3	6.8 7 . 3
8.0	4.6	5.0	5.3	5.6	5.9	6.1	6.3	6.4	6.6	6.7	6.9	7.0	7.1	7.2	7.3	7.4	7.5	7.6	7.7	7.8	7.8
8.5 9.0	4.9	5.3	5.7	6.0	6.2	6.5	6.7	6.8	7.0	7.2	7.3	7.4	7.6	7.7	7.8	7.9	8.0	8.1	8.2	8.2	8.3
9.5	5.2 5.5	5.6	6.0	6.3	6.6 7.0	6.8 7.2	7.0 7.4	7.2 7.6	7.4 7.8	7.6 8.0	7.7 8.2	7.9 8.3	8.0 8.4	8.1	8.2	8.3	8.4	9.0	8.6 9.1	8.7 9.2	8.8 9.3
10.0	5,8	6.3	6.7	7.0	7.3	7.6	7.8	8.0	8.2	8.4	8.6	8.7	8.9	9.0	9.1	9.3	9.4	9.5	9.6	9.7	9.8
10.5 11.0	6.1	6.6	7.0 7.3	7.4 7.7	7.7 8.1	8.0	8.2	8.4	8.7 9.1	8.8 9.3	9.0	9.2	9.3	9.5	9.6	9.7			10.1		
11.5	6.7	7.2	7.7	8.1	8.4	8.7	9.0	9.3	9.5	9.7	9.9	10.1	10.2	10.4	10.5	10.7	10.8	10.9	11.0	11.1	11.3
12.0 12.5	7.0 7.2	7.5 7.8	8.0	8.4	9.2	9.1	9,4	9.7		10.1											
13.0	7.5	8.2	8.7	9.1	9.5	9.9	10.2	10.5	10.7	10.9	11.2	11.4	11.6	11.7	11.9	12.1	12.2	12.3	12.5	12.6	12.7
13.5 14.0	7.8 8.1	8.5	9.0 9.4	9.5						11.4											
14.5	8.4	9.1	9.7	10.2	10.6	11.0	11.4	11.7	12.0	12.2	12.5	12.7	12.9	13.1	13.3	13.4	13.6	13.8	13.9	14.1	14.2
15.0 15.5	8.7 9.0									12.6											
16.0										13.1											
16.5										13.9											
17.0 17.5										14.3											
18.0	10.4	11.3	12.0	12.7	13.2	13.7	14.1	14.5	14.8	15.2	15.5	15.7	16.0	16.2	16.5	16.7	16.9	17.1	17.3	17.4	17.6
18.5 19.0	11.0	11.9	12.7	13.4	13.9	14.0	14.9	15.3	15.7	15.6	15.9	16.6	10.4	17.1	17.4	17.6	17.4	18.0	18.2	17.9	18.6
19.5	11.3	12.2	13.0	13.7	14.3	14.8	15.3	15.7	16.1	16.4	16.8	17.1	17.3	17.6	17.8	18.1	18.3	18.5	18.7	18.9	19.1
20.0 20.5										16.8 17.3											
21.0	12.2	13.2	14.0	14.8	15.4	16.0	16.4	16.9	17.3	17.7	18.0	18.4	18.7	19.0	19.2	19.5	19.7	19.9	20.1	20.4	20.5
21.5 22.0										18.1											
22.5	13.0	14.1	15.0	15.8	16.5	17.1	17.6	18.1	18.6	19.0	19.3	19.7	20.0	20.3	20.6	20.9	21.1	21.4	21.6	21.8	22.0
23.0 23.5										19.4 19.8											
24.0	13.9	15.1	16.0	16.9	17.6	18.2	18.8	19.3	19.8	20.2	20.6	21.0	21.3	21.7	22.0	22.3	22.5	22.8	23.0	23.3	23.5
24.5 25.0										20.6											
25.5										21.5											
26.0										21.9											
26.5 27.0										22.8											
27.5	16.0	17.3	18.4	19.3	20.2	20.9	21.5	22.1	22.7	23.2	23.6	24.1	24.5	24.8	25.2	25.5	25.8	26.1	26.4	26.7	26.9
28.0 28.5										23.6											
29.0	16.8	18.2	19.4	20.4	21.3	22.0	22.7	23.3	23.9	24.4	24.9	25.4	25.8	26.2	26.5	26.9	27.2	27.5	27.8	28.1	28.4
29.5 30.0										24.9 25.3											
30.5	17.7	19.2	20.4	21.5	22.4	23.2	23.9	24.6	25.2	25.7	26.2	26.7	27.1	27,5	27.9	28.3	28.6	29.0	29.3	29.6	29.8
31.0 31.5										26.1 26.5											
32.0	18.6	20.1	21.4	22.5	23.5	24.3	25.1	25.8	26.4	27.0	27.5	28.0	28.5	28.9	29.3	29.7	30.0	30.4	30.7	31.0	31.3
32.5 33.0										27.4 27.8											
33.5	19.4	21.1	22.4	23.6	24.6	25.5	26.3	27.0	27.6	28.2	28.8	29.3	29.8	30.2	30.7	31.1	31.4	31.8	32.1	32,5	32.8
34.0 34.5										28.7 29.1											
35.0	20.3	22.0	23.4	24.6	25.7	26,6	27.4	28.2	28.9	29.5	30.1	30.6	31.1	31.6	32.0	32.5	32.9	33.2	33.6	33.9	34.2
35.5 36.0										29.9											
36.5	21.2	23.0	24.4	25.7	26.8	27.8	28.6	29.4	30.1	30.8	31.4	31.9	32.5	33.0	33.4	33.9	34.3	34.7	35.0	35.4	35.7
37.0 37.5										31.2 31.6											
38.0	22.1	23.9	25.4	26.7	27.9	28.9	29.8	30.6	31.4	32.0	32.7	33.3	33.8	34.3	34.8	35.2	35.7	36.1	36.5	36.8	37.2
38.5 39.0										32.5 32.9											
39.5										33.3											
40.0 40.5										33.7											
41.0										34.1 34.6											
41.5										35.0											
42.0 42.5	24.7	26.8	28.5	29.9	31.2	32.3	33.3	34.2	35.1	35.4 35.8	36.5	37.2	37.8	38.4	38.9	39.4	39.9	40.4	40.8	41.2	41.6
43.0	25.0	27.1	28.8	30.3	31.6	32.7	33.7	34.6	35.5	36.3	37.0	37.6	38.3	38.8	39.4	39.9	40.4	40.8	41.3	41.7	42.1
43.5 44.0										36.7 37.1											
44.5	25.9	28.0	29.8	31.3	32.7	33.8	34.9	35.9	36.7	37.5	38.3	38.9	39.6	40.2	40.7	41.3	41.8	42.3	42.7	43.1	43.5
45.0 45.5										37.9 38.4											
46.0	26.7	29.0	30.8	32.4	33.8	35.0	36.1	37.1	38.0	38.8	39.6	40.3	40.9	41.5	42.1	42.7	43.2	43.7	44.1	44.6	45.0
46.5 47.0										39.2 39.6											
47.5	27.6	29.9	31.8	33.5	34.9	36.1	37.3	38.3	39.2	40.1	40.8	41.6	42.3	42.9	43.5	44.1	44.6	45.1	45.6	46.0	46.5
48.0 48.5										40.5											
49.0	28.5	30.9	32.8	34.5	36.0	37.3	38.4	39.5	40.5	41.3	42 - 1	42.9	43.6	44.3	44.9	45.5	46.0	46.5	47.0	47.5	48.0
49.5 50.0										41.8											
- 0 - 0				• 2	,	2-10	5.12	و د ن .	-1.0		0		• >	6			,	, ,	-, U • U		7017

STUMP DDB	0.0	0.2	0.4	0.6	0.8	1.0						FEET:				3.0	3.2	3.4	3.6	3.8	4.0
5.0 5.5	3.0 3.3	3.2 3.5	3.4 3.7	3.5 3.9	3.6 4.0	3.8 4.1	3.9 4.3	4.0	4·1 4·5	4.2	4.2	4.3 4.7	4.4	4.5 4.9	4.5 5.0	4.6 5.0	4.6	4.7	4.8	4.8 5.3	4.9
6.0	3.7	3.9	4.1	4.2	4.4	4.5	4.6	4.8	4.9	5.0	5.1	5.2	5.3	5.3	5.4	5.5	5.1 5.6	5.2 5.6	5.2 5.7	5.8	5.4 5.8
6.5 7.0	4.0	4.2	4.4	4.6	4.7 5.1	4.9 5.3	5.0 5.4	5 • 2 5 • 6	5.3 5.7	5.4 5.8	5.5 5.9	5.6 6.0	5.7 6.1	5.8 6.2	5.9 6.3	6.0	6.0	6.1	6.2	6.3	6.3 6.8
7.5 8.0	4.6	4.8 5.2	5.1 5.4	5.3 5.6	5.5 5.8	5.6 6.0	5.8 6.2	6.0	6.1	6.2	6.3	6.5	6.6 7.0	6.7	6.8 7.2	6.9	7.0	7.1 7.5	7.1 7.6	7.2 7.7	7.3 7.8
8.5	5.2	5.5	5.7	6.0	6.2	6.4	6.6	6.7	6.9	7.1	7.2	7.3	7.5	7.6	7.7	7.8	7.9	8.0	8.1	8.2	8.3
9.0 9.5	5.5 5.8	5.8 6.1	6.1	6.3	6.6	6.8 7.1	7.0	7.1 7.5	7.3 7.7	7.5 7.9	7.6 8.0	7.8 8.2	7.9 8.3	8.0	8.1	8.3	8.4 8.8	8.5	8.6 9.1	8.7 9.2	8.8 9.3
10.0 10.5	6.1	6.4	6.8 7.1	7.0 7.4	7.3 7.6	7.5 7.9	7.7	7.9 8.3	8.1	8.3 8.7	8.5	8.6	8.8	8.9 9.4	9.0	9.2	9.3	9.4	9.5	9.6 10.1	9.7
11.0	6.7	7.1	7.4	7.7	8.0	8.3	8.5	8.7	8.9	9.1	9.3	9.5	9.6	9.8	9.9	10.1	10.2	10.4	10.5	10.6	10.7
11.5 12.0	7.0 7.3	7.4 7.7	7.8 8.1	8.1 8.4	8.4 8.7	8.6 9.0	8.9 9.3	9•1 9•5	9.3 9.7	9.5 9.9	9.7	9,9	10.1	10.2	10.4	10.5	10.7	10.8	11.0	11.1	11.2
12.5 13.0	7.6 7.9	8.Q 8.4	8.4	8.8 9.1	9·1 9·5	9,4	9.7	9.9	10.1	10.4	10.6	10.8	11.0	11.1	11.3	11.5	11.6	11.8	11.9	12.0	12.2
13.5	8.2	8.7	9.1	9.5	9.8	10.1	10.4	10.7	11.0	11.2	11.4	11.6	11.8	12.0	12.2	12.4	12.5	12.7	12.9	13.0	13.2
14.0 14.5	8.5 8.8	9.0	9.4 9.8	10.2	10.2	10.5	10.8	11.1	11.4	11.6	11.8	12.1	12.3	12.5	12.7	12.8	13.0	13.2	13.3	13.5	13.6
15.0 15.5	9.1		10.1	10.5	10.9	11.3	11.6	11.9	12.2	12.4	12.7	12.9	13.1	13.3	13.6	13.7	13.9	14.1	14.3	14.5	14.6
16.0	9.7	10.3	10.8	11.2	11.6	12.0	12.4	12.7	13.0	13.3	13.5	13.8	14.0	14.2	14.5	14.7	14.9	15.1	15.2	15.4	15.6
16.5 17.0	10.0	10.6	11.1	11.6	12.0	12.4	12.7	13.1	13.4	13.7	13.9	14.2	14.4	14.7	14.9	15.1	15.3	15.5	15.7	15.9 16.4	16.1
17.5 18.0	10.6	11.2	11.8	12.3	12.7	13.1	13.5	13.9	14.2	14.5	14.8	15.1	15.3	15.6	15.8	16.0	16.3	16.5	16.7	16.9	17.1
18.5	11.2	11.9	12.4	13.0	13.4	13,9	14.3	14.6	15.0	15.3	15.6	15.9	16.2	16.5	16.7	16.9	17.2	17.4	17.6	17.3 17.8	18.0
19.0 19.5	11.5	12.2	12.8	13.3	13.8	14.2	14.7	15.0	15.4	15.7	16.0	16.3	16.6	16.9	17.2 17.6	17.4	17.6	17.9	18.1	18.3	18.5
20.0 20.5	12.1	12.8	13.4	14.0	14.5	15.0	15.4	15.8	16.2	16.6	16.9	17.2	17.5	17.8	18.1	18.3	18.6	18.8	19.0	19.3	19.5
21.0	12.7	13.5	14.1	14.7	15.2	15.7	16.2	16.6	17.0	17.4	17.7	18.1	18.4	18.7	19.0	19.2	19.5	19.8	20.0	20.2	20.5
21.5 22.0	13.3	14.1	14.8	15.4	16.0	16.5	17.0	17.4	17.8	18.2	18.6	18.9	19.2	19.6	19.9	20.1	20.4	20.7	20.9	20.7	21.4
22.5 23.0	13.6	14.4	15.1	15.8	16.3	16.9	17.3	17.8	18.2	18.6	19.0	19.3	19.7	20.0	20.3	20.6	20.9	21.2	21.4	21.7	21.9
23.5	14.2	15.0	15.8	16.4	17.0	17.6	18.1	18.6	19.0	19.4	19.8	20.2	20.6	20.9	21.2	21.5	21.8	22.1	22.4	22.6	22.9
24.0 24.5	14.8_	15.7	16.4	17.1	17.8	18.3	18.9	19.4	19.8	20.3	20.7	21.1	21.4	21.8	22.1	22.4	22.7	23.0	23.3	23.1 23.6	23.9
25.0 25.5	15.1	16.0	16.8	17.5	18.1	18.7	19.3	19.8	20.2	20.7	21.1	21.5	21.9	22.2	22.6	22.9	23.2	23.5	23.8	24.1	24.4
26.0 26.5	15.7	16.6	17.4	18.2	18.8	19.5	20.0	20.5	21.0	21.5	21.9	22.3	22.7	23.1	23.5	23.8	24.1	24.4	24.8	25.0	25.3
27.0	16.3	17.2	18.1	18.9	19.6	20.2	20.8	21.3	21.8	22.3	22.8	23.2	23.6	24.0	24.4	24.7	25.1	25.4	25.7	25.5 26.0	26.3
27.5 28.0																				26.5	
28.5 29.0																				27.4 27.9	
29.5	17.8	18.8	19.8	20.6	21.4	22.0	22.7	23.3	23.8	24.4	24.9	25.3	25.8	26.2	26.6	27.0	27.4	27.7	28.1	28.4	28.7
30.0 30.5	18.3	19.5	20.4	21.3	22.1	22.8	23.5	24.1	24.6	25.2	25.7	26.2	26.6	27.1	27.5	27.9	28.3	28.7	29.0	28.9 29.4	29.7
31.0 31.5																				29.9 30.3	
32.0 32.5	19.2	20.4	21.4	22.3	23.1	23.9	24.6	25.2	25.8	26.4	27.0	27.5	27.9	28.4	28.9	29.3	29.7	30.1	30.5	30.8	31.2
33.0	19.8	21.0	22.1	23.0	23.9	24.6	25.4	26.0	26.7	27.2	27.8	28.3	28.8	29.3	29.8	30.2	30.6	31.0	31.4	31.8	32.1
33.5 34.0	20.4	21.7	22.7	23.7	24.6	25.4	26.1	26.8	27.5	28.1	28.6	29.2	29.7	30.2	30.6	31.1	31.5	31.9	32.3	32·3 32·7	33.1
34.5 35.0	20.7	22.0	23.1	24.0	24.9	25.7	26.5	27.2	27.9	28.5	29.0	29.6	30.1	30.6	31.1	31.6	32.0	32.4	32.8	33.2 33.7	33.6
35.5	21.3	22.6	23.7	24.7	25.6	26,5	27.3	28.0	28.7	29.3	29.9	30.4	31.0	31.5	32.0	32.5	32.9	33.4	33.8	34.2	34.6
36.0 36.5	21.9	23.2	24.4	25.4	26.4	27.2	28.0	28.8	29.5	30.1	30.7	31.3	31.9	32.4	32.9	33.4	33.8	34.3	34.7	34.7 35.1	35.5
37.0 37.5	22.2	23.5	24.7 25.0	25.8	26.7 27.1	27.6	28.4	29.1	29.9	30.5	31.1	31.7	32.3	32.8	33.3	33.8	34.8	34.8 35.2	35.2 35.7	35.6 36.1	36.0
38.0 38.5	22.8	24.2	25.4	26.5	27.4	28,3	29.2	29.9	30.7	31.3	32.0	32.6	33.2	33.7	34.2	34.7	35.2	35.7	36.1	36.6	37.0
39.0	23.4	24.8	26.0	27.1	28.1	29.1	29.9	30.7	31.5	32.1	32.8	33.4	34.0	34.6	35.1	35.7	36.2	36.6	37.1	37.1 37.5	38.0
39.5 40.0	24.0	25.4	26.7	27.8	28.9	29.4	30.3	31.1	31.9	32.6	33.2	33.9	34.5	35.0 35.5	35.6	36.1 36.6	36.6 37.1	37.1 37.6	37.6	38.0 38.5	38.5 38.9
40.5 41.0	24.2	25.7	27.0	28.2	29.2	30.2	31.1	31.9	32.6	33.4	34.1	34.7	35.3	35.9	36.5	37.0	37.5	38.0	38.5	39.0 39.5	39.4
41.5	24.8	26.3	27.7	28.9	29.9	30.9	31.8	32.7	33.4	34.2	34.9	35.6	36.2	36.8	37.4	37.9	38.5	39.0	39.5	39.9	40.4
42.0 42.5																				40.4	
43.0 43.5																				41.4	
44.0 44.5	26.3	27.9	29.3	30.6	31.7	32.7	33.7	34.6	35.4	36.2	37.0	37.7	38.4	39.0	39.6	40.2	40.8	41.3	41.8	42.3	42.8
45.0	26.9	28.5	30.0	31.2	32.4	33.5	34.5	35.4	36.2	37.0	37.8	38.5	39.2	39.9	40.5	41.1	41.7	42.2	42.8	42.8 43.3	43.8
45.5 46.0	27.2	28.8	30.3	31.6	32.8	33.8 34.2	34.8 35.2	35.8 36.2	36.6 37.0	37.5 37.9	38.2 38.6	39.0 39.4	39.7 40.1	40.3	41.0	41.6	42.2	42.7	43.3	43.8	44.8
46.5 47.0	27.8	29.4	30.9	32.3	33.5	34.6	35.6	36.5	37.4	38.3	39.1	39.8	40.5	41.2	41.9	42.5	43.1	43.7	44.2	44.7	45.3
47.5	28.3	30 • 1	31.6	32.9	34.2	35.3	36.4	37.3	38.2	39.1	39.9	40.7	41.4	42.1	42.7	43.4	44.0	44.6	45.2	45.7	46.2
48.0 48.5	28.9	30.7	32.2	33.6	34.9	36.0	37.1	38.1	39.0	39.9	40.7	41.5	42.2	43.0	43.6	44.3	44.9	45.5	46.1	46·2 46·7	47.2
49.0 49.5	29.2	31.0	32.6	34.0	35.2	36.4	37.5	38.5	39.4	40.3	41.1	41.9	42.7	43.4	44.1	44.7	45,4	46.0	46.6	47.1	47.7
50.0	29.8	31.6	33.2	34.7	35.9	37.1	38.2	39.3	40.2	41.1	42.0	42.8	43.5	44.3	45.0	45.7	46.3	46.9	47.5	48.1	48.7

STUMP DOB	0.0 0.2	0.4	0.6 0.8	1.0 1.2	ST 1.4	UMP HEIG 1.6 1.	HT (IN	FEET) 2.2	2.4	2,6	2.8	3.0	3,2	3,4	3.6	3.8	4.0
5.0 5.5 6.0	3.1 3.4 3.4 3.7 3.7 4.0	3.9 4.3	3.7 3.9 4.1 4.3 4.5 4.6	4.0 4.1 4.4 4.5 4.8 4.9	4.2 4.6 5.1	4.3 4. 4.7 4. 5.2 5.	8 4.9 2 5.3	4.5 5.0 5.4	4.6 5.0 5.5	4.6 5.1 5.6	4.7 5.1 5.6	4.7 5.2 5.7	4.8 5.2 5.7	4.8 5.3 5.8	4.9 5.3 5.8	4.9 5.4 5.9	4.9 5.4 5.9
6.5 7.0 7.5	4.0 4.3 4.3 4.7 4.6 5.0	5.0 5.3	4.8 5.0 5.2 5.4 5.6 5.8	5.2 5.3 5.6 5.7 6.0 6.1	5.5 5.9 6.3	5.6 5. 6.0 6. 6.4 6.	1 6.2 5 6.7	5.9 6.3 6.8	5.9 6.4 6.8	6.5	6.1 6.5 7.0	6.1 6.6 7.1	6.2 6.7 7.1	6.7	6.8	6.4	6.4
8.0 8.5 9.0	4.9 5.3 5.2 5.6 5.5 6.0	6.0	5.9 6.2 6.3 6.5 6.6 6.9	6.4 6.5 6.8 6.9 7.1 7.3	6.7 7.1 7.5	6.8 7. 7.3 7. 7.7 7.	4 7.5 8 8.0	7.2 7.6 8.1	7.3 7.7 8.2	7.4 7.8 8.3	7.5 7.9 8.4	7.5 8.0 8.5	7.6 8.1 8.6	7.7 8.2 8.6	7.8 8.2 8.7	7.8 8.3 8.8	7.9 8.4 8.9
9.5 10.0 10.5	5.8 6.3 6.1 6.6 6.4 6.9	7.0 7.4	7.0 7.3 7.4 7.7 7.7 8.0	7.5 7.7 7.9 8.1 8.3 8.5	7.9 8.3 8.8	8.1 B. 8.5 8. 8.9 9.	7 8.8 1 9.3	8.5 9.0 9.4	8.6 9.1 9.5	8.8 9.2 9.7	8.9 9.3 9.8	9.9	9.0 9.5 10.0		9.2 9.7 10.2		9.3 9.8 10.3
11.0 11.5 12.0	6.7 7.2 6.9 7.5 7.2 7.9	7.7 8.0 8.4	8.1 8.4 8.4 8.8 8.8 9.1	8.7 8.9 9.1 9.3 9.5 9.7	9.2 9.6 10.0	9.4 9. 9.8 10. 10.2 10.	0 10.1	10.3		10.6	10.7	10.8	10.9	11.0	11.1	11.2	11.3
12.5 13.0 13.5	7.5 8.2 7.8 8.5 8.1 8.8	8.7 9.0	9.1 9.5 9.5 9.9	9.8 10.1 10.2 10.5 10.6 10.9	10.4	10.6 10. 11.0 11.	8 11.0 2 11.4	11.2	11.3	11.5 11.9	11.6	11.7 12.2	11.9	12.0	12.1	12.2	12.3
14.0 14.5 15.0	8.4 9.1 8.6 9.4	9.7 1	10.2 10.6	11.0 11.3 11.4 11.7 11.7 12.1	11.6 12.0	11.8 12. 12.3 12.	1 12.3 5 12.7	12.5 12.9	12.7 13.1	12.8 13.3	13.0 13.4	13.1 13.6	13.3 13.7	13.4 13.9	13.5 14.0	13.6 14.1	13.7 14.2
15.5 16.0 16.5	9.2 10.0 9.5 10.3	10.7 1	11.2 11.7	12.1 12.5 12.5 12.9 12.9 13.2	12.8 13.2	13.1 13. 13.5 13.	3 13.6 7 14.0	13.8	14.0 14.4	14.2	14.4	14.5	14.7 15.1	14.8 15.3	15.0 15.4	15.1 15.6	15.2 15.7
17.0 17.5	10.0 10.9	11.6 1	12.3 12.8	13.2 13.6 13.6 14.0 14.0 14.4	14.0 14.4	14.3 14. 14.7 15.	6 14.8 0 15.3	15.1 15.5	15.3 15.8	15.5	15,7 16.2	15.9 16.4	16.1 16.5	16.2 16.7	16.4 16.9	16.5 17.0	16.7 17.2
18.0 18.5 19.0		12.6 1	13.3 13.8	14.3 14.8 14.7 15.2	15.2 15.6	15.5 15. 15.9 16,	8 16.1 2 16.5	16.4 16.8	16.6 17.1	16.9 17.3	17.1	17.3	17.5 17.9	17.7 18.1	17.8 18.3	18.0 18.5	18.1 18.6
19.5 20.0 20.5	11.6 12.7 11.9 13.0	13.6 1	14.3 14.9	15.4 15.9 15.8 16.3	16.3 16.7	16.7 17. 17.1 17.	1 17.4 5 17.8	17.7 18.1	17.9 18.4	18.2 18.6	18.4 18.9	18.7 19.1	18.9 19.3	19.1 19.5	19.3 19.7	19.4	19.6 20.1
21.0 21.5 22.0	12.7 13.9	14.5 1 14.8 1	15.3 15.9 15.6 16.3	16.5 17.0 16.9 17.4	17.5 17.9	17.9 18. 18.3 18.	3 18.6 7 19.1	19.0 19.4	19.3 19.7	19,5 20.0	19.8 20.2	20.0	20.3 20.7	20.5	20.7	20.9 21.4	21.1
22.5 23.0 23.5	13.2 14.4 13.5 14.7	15.4 1 15.7 1	16.3 17.0 16.6 17.3	17.3 17.8 17.6 18.2 18.0 18.5	18.7 19.0	19.1 19. 19.5 19.	5 19.9 9 20.3	20.2	20.6	20.9	21.1	21.4	21.6	21.9	22.6	22.8	22.5
24.0 24.5 25.0	14.0 15.3 14.2 15.6	16.4 1 16.7 1	17.2 18.0 17.6 18.4		19.8 20.2	20.3 20.	7 21.1 1 21.5	21.5	21.9	22.2	22.5	22.8	23.0 23.5	23.3	23.5	23.8	24.0 24.5
25.5 26.0 26.5	14.7 16.1 15.0 16.4	17.3 1 17.6 1	18.2 19.0		21.0	21.5 21.	9 22.4 3 22.8	22.8	23.1	23.5	23.8	24.1 24.6	24.4	24.7	25.0 25.4	25.2 25.7	25.4 25.9
27.0 27.5 28.0	15.5 16.9	18.2 1	19.2 20.0	20.5 21.1 20.8 21.5 21.2 21.8	22.1	22.6 23.	1 23.6	24.0	24.4	24.8	25.1	25.5	25.8	26.1	26.4	26.6	26.9
28.5 29.0 29.5	16.2 17.8	19.0 2	20.1 21.0	21.5 22.2 21.9 22.6 22.2 22.9	23.2	23.8 24.	3 24.8	25.3	25.7	26.1	26.5	26.8	27.2	27.5	27.8	28.1	28.4
30.0 30.5 31.0	16.9 18.6	19.9 2	21.1 22.0	22.6 23.3 22.9 23.7 23.2 24.0	24.3	25.0 25.	5 26.0	26.5	27.0	27.4	27.8	28.2	28.5	28.9	29.2	29.5	29.8
31.5 32.0 32.5	17.6 19.4	20.8 2	22.0 23.0	23.6 24.4 23.9 24.7 24.3 25.1	25.4	26.1 26.	7 27.3	27.8	28.2	28.7	29.1	29.5	29.9	30.3	30.6	30.9	31.3
33.0 33.5 34.0	18.1 19.9 18.3 20.2	21.4 2	22.6 23.7 22.9 24.0	24.6 25.4 24.9 25.8 25.3 26.1	26.2 26.6	26.9 27. 27.2 27.	5 28.1 9 28.5	28.6 29.0	29.1 29.5	29.6	30.0	30.4	30.8	31.2	31.5	31.9	32.2
34.5 35.0 35.5	18.8 20.7 19.0 20.9	22.5	23.5 24.6 23.8 25.0	25.6 26.5 26.0 26.8 26.3 27.2	27.3 27.6	28.0 28. 28.4 29.	7 29.3	29.8 30.2	30.4 30.8	30.8 31.3	31.3 31.7	31.8 32.2	32.2 32.6	32.6 33.0	33.0 33.4	33.3 33.8	33.7 34.2
36.0 36.5 37.0	19.4 21.4 19.7 21.7	23.1 2	24.4 25.6 24.7 25.9	26.6 27.5 27.0 27.9 27.3 28.2	28.4 28.7	29.1 29. 29.5 30.	8 30.5	31.1 31.5	31.6	32.1 32.6	32.6	33.1 33.5	33.5	34.0 34.4	34.4 34.8	34.7 35.2	35.1 35.6
37.5 38.0 38.5	20.1 22.2 20.3 22.4	23.9 2	25.3 26.5 25.6 26.9	27.6 28.6 28.0 28.9 28.3 29.3	29.5 29.8	30.2 31.	0 31.6	32·3 32·7	32.9 33.3	33.4 33.8	33.9 34.4	34.4 34.9	34.9 35.3	35.3 35.8	35.8 36.2	36.2 36.6	36.6 37.1
39.0 39.5 40.0	20.8 22.9 21.0 23.2	24.7 2 25.0 2	26.2 27.5 26.5 27.8	28.6 29.6 28.9 30.0 29.3 30.3	30·5 30·9	31.4 32. 31.7 32.	1 32.8	33.5 33.9	34·1 34·5	34.7 35.1	35.2 35.7	35.7 36.2	36.2 36.7	36.7 37.2	37.2 37.6	37.6 38.1	38.0 38.5
40.5 41.0	21.4 23.7 21.6 23.9	25.5 2	27.1 28.4 27.3 28.7	29.6 30.6	31.6 31.9	32.5 33.	3 34.0	34.7 35.1	35.3 35.7	35.9 36.4	36.5 37.0	37.1 37.5	37.6 38.0	38.1 38.5	38.6 39.0	39.0 39.5	39.5 39.9
41.5 42.0 42.5	22.0 24.4 22.2 24.6	26.3 2	27.9 29.3 28.2 29.6	30.2 31.3 30.6 31.7 30.9 32.0	32.7 33.0	33.6 34. 33.9 34.	4 35.2 8 35.6	35.9 36.3	36.6 37.0	37.2 37.6	37.8 38.2	38.4 38.8	38.9 39.4	39.5 39.9	40.0	40.4	40.9 41.4
43.0 43.5 44.0	22.7 25.1 22.9 25.3	27.1 2 27.3 2	28.8 30.2 29.1 30.5	31.2 32.3 31.5 32.7 31.8 33.0	33.7 34.1	34.6 35. 35.0 35.	5 36.3 9 36.7	37.1 37.5	37.8 38.2	38.5 38.9	39.1 39.5	39.7 40.1	40.3	40.8 41.3	41.3 41.8	41.9 42.3	42.3 42.8
44.5 45.0 45.5	23.3 25.8 23.5 26.0	27.9 2 28.1	29.6 31.1 29.9 31.4	32.2 33.3 32.5 33.7 32.8 34.0	34.7 35.1	35.7 36. 36.1 37	6 37.5	38.3 38.7	39.0 39.4	39.7 40.1	40.4	41.0 41.4	41.6	42.2 42.6	42.7 43.2	43.3 43.7	43.8 44.3
46.0 46.5 47.0	23.9 26.5 24.1 26.7	28.6	30.4 32.0 30.7 32.3	33.1 34.3 33.4 34.7 33.7 35.0	35.8 36.1	36.8 37. 37.2 38.	8 38.6	39.5 39.9	40.2 40.6	41.0	41.7 42.1	42.3 42.8	42.9 43.4	43.5	44.1 44.6	44.7 45.2	45.2 45.7
47.5 48.0 48.5	24.4 27.1 24.6 27.4	29.4	31.3 32.9 31.5 33.2	34.0 35.3 34.3 35.6 34.6 36.0	36.8	37.9 38. 38.2 39.	9 39.8	40.6 41.0	41.4 41.8	42.2 42.6	42.9 43.4	43.6 44.1	44.3 44.7	44.9 45.4	45.5 46.0	46.1 46.6	46.7 47.1
49.0 49.5 50.0	25.0 27.8	30.1	32.1 33.8	35.0 36.3 35.3 36.6 35.6 36.9	37.8	38.9 40.	0 40.9	41.8	42.7	43.4	44.2	44.9	45.6	46.3	46.9	47.5	48.1

STUMP	0.0			0.6	0.8	1.0	1.2	- STU	JMP HE	16HT	(IN F	EET) 2.2	2.4	2.6	2.8	3.0	3.2	3.4	3.6	3.8	4.0
00B 5.0	2.9	3.1	3.4	3.5	3.7	3,8	3.9	4.0	4.1	4.2	4.3	4.4 4.8	4.5	4.5 5.0					4.8 5.3	4.8 5.3	4.9 5.4
5.5 6.0	3.2 3.5	3.5 3.8	3.7 4.0	3.9 4.2	4.4	4.6	4.7	4.4	5.0	5.1	5.2	5,3	5.3	5.4	5.5	5.6	5.6	5.7	5.8	5.8 6.3	5.9 6.4
6.5 7.0	3.8	4.1 4.4	4.4	4.6	4.8 5.2			5.3 5.7	5.4 5.8	5.5 5.9		5.7 6.1	5.8	6.3	6.4	6.5	6.6	6.7	6.7 7.2	6.8	6.9
7.5	4.4	4.7	5.0	5.3	5.5	5.7	5.9	6.1	6.2	6.8		6.6 7.0	6.7 7.1	6.8 7.2	7.3	7.4	7.1 7.5	7.1 7.6	7.7	7.8	7.8
8.0 8.5	4.7 5.0	5.1 5.4	5.4 5.7	5.7 6.0	6.3	6.5	6.7	6.9	7.0	7.2		7.5	7.6	7.7 8.2			8.0	8.1	8.2 8.6	8.2 8.7	8.3 8.8
9.0 9.5	5.3 5.6	5.7 6.0	6.1 6.4	6.4 6.7	6.6 7.0	7.3		7.3 7.7	7.5 7.9	7.6 8.1	8.2	8.3	8.5	8.6	8.7	8.8	8.9	9.0	9.1	9.2	9.3
10.0	5.9	6.4	6.8 7.1	7.1 7.5	7.4 7.8		7.9 8.3	8.1	8.3 8.7	8.5 8.9	8.6 9.1	8.8 9.2	8.9 9.4	9.1 9.5	9.6	9.3	9.9	0.0	10.1	10.2	10.3
10.5 11.0	6.2 6.5	7.0	7.4	7.8	8.1	8.4	8.7	8.9	9.1	9.3 9.8	00	101	10.3	10.4	10.1 1	0.7 1	.0.8	.0.9	11.1	11.2	11.3
11.5 12.0	6.8 7.1	7·3 7·7	7.8 8.1	8.2 8.5	8.5 8.9		9.1 9.5						10 7	109	11.0 1	1.2 1	1.3	11.4	11.7	11.7	11.0
12.5	7.4	8.0 8.3	8.5 8.8	8.9	9.3 9.7																
13.0 13.5	8.0	8.6	9.2	9.6	10.0	10.4 1	10.7	11.0	11.2	11.5	11.7	11.7	12.5	12.7	12.9	3.0	3.2	13.3	13.5	13.6	13.7
14.0 14.5	8.3 8.6	9.0 9.3	9.9	10.4	10.8	11.2	11.2	11.8	12.1	12.3	12.0	12.0	13.6	13 6	13.8	14.0	14.1	14.3	14.4	14.6	14.7
15.0 15.5	8.9 9.2	9.6	10.2	10.7	11.6	11.6	12.3	12.6	12.9	13.2	13.5	13.7	13.9	14.1	14.3	14.5	14.6	14.8	14.9	15.1	15.2 15.7
16.0	9.5	10.3	10.9	11.5	11.9	12.3	12.7	13.1	13,4	13.0	14.3	17.1	1,4	15.0	15.2	15.4	15.6	15.7	15.9	16.0	16.2
16.5 17.0	10.1	10.9	11.6	12.2	12.7	13.1	13.3	13.7	14.2	14.0	15 2	15.5	15.7	15.9	16-1	16.3	16.5	16.7	16.9	17.0	17.2
17.5 18.0	10.4	11.6	12.3	12.9	13.5	13.9	14.3	14.7	15.1	15.4	15.7	15.9	16.2	16.4	16.6	16.8	17.0	17.2	17.8	17.5	17.7 18.1
18.5	11.1	11.9	12.7	13.3	13.8	14.3	14.7	12.1	19.0	13.0	10.1	1017	17.1	17 2	17.5	57.7	17.9	18.1	18.3	18.5	18.6
19.0 19.5	11.7	12.6	13.4	14.0	14.0	15.1	15.0	10.0	10.3	1011	1 7	1777	18 0	18 2	18.5	18.7	18.9	19.1	19.3	19.5	19.6
20.0 20.5	12.3	13.3	14.1	14.8	15.4	15.9	10.4	10.0	11.2	17.00	10 3	10.2	18 9	19.2	19.4	19.6	19.8	20.1	20.2	20.4	20.6
21.0 21.5	12.6	13.6	14.4	15.2	15.8	10.3	10.0	17.2	17.0	10.0	10.3	10.1	10 3	10 6	19.9	20.1	20.3	20.5	20.7	20.9	21.1
22.0	13.2	14.3	15.2	15.9	16.5	17.1	17.6	18 - 1	10.5	10.0	10 6	20.0	20.3	20.5	20.8	21.0	21.3	21.5	21.7	21.9	22.1
22.5 23.0	13.9	15.0	15.9	16.6	17.3	17.9	18.4	10.7	17.3	17.1	20 E	20.7	21 2	21.5	21.7	22.0	22.2	22.5	22.7	22.9	23.1
23.5 24.0	14.2	15.3	16.2	17.0	17.7	18.3	19.3	19.7	20.2	20.6	21.0	21.3	21.6	21.9	22.2	22.5	22.7	22.9	23.2	23.4	23.6
24.5	14.8	- 16.0	17.0	17.8	18.5	19.1	19.7	20.2	20.0	21.0	21.7	22 2	22.5	22.9	23.1	23.4	23.7	23.9	24.1	24.3	24.5
25.0 25.5	15.5	16.7	17.7	18.5	14.3	12.2	20.5	21.0	21.0	200	22.7	22 1	23 5	22 8	24.1	24-4	24.6	24.9	25.1	25.3	25.5
26.0 26.5	16.1	. 17.4	18.4	19.3	20.0	20.7	21.3	21.07	22.5	22.0	23.2	24.0	24 4	24 7	25.0	25.3	25.6	25.8	26.1	26.3	26.5
27.0 27.5	16.4	17.7	18.8	19.7	20.4	21.1	21.	22.3	22.0	23.2	23.0	24 6	24.0	25 2	25.5	25.8	26.1	26.3	26.6	26.8	27.0
28.0	17.1	18.4	19.5	20.4	21.4	2107	22.0	73 · T	25.0		25.0	0.5	2 8 9	26 1	26.4	26.7	27.0	27.3	27.5	27.8	28.0
28.5 29.0	17.	7 19.1	20.2	21.2	22.0	22.7	23.4	24.0	24.5	25.0	25.7	25.0	26.7	27.0	27.4	27.7	28.0	28.2	28.5	28.7	29.0
29.5 30.0	18.0	19.4	20.0	21.0	22.4	23.1	20.0	27.7	2707	23.7	24 2	24 0	27 (27 5	27.8	28.2	28.4	28.7	29.0	29.2	29.5
30.5	18.	7 20•1	21.3	22.3	23.2	24.0	24.0	22.2	23.0	20.3	20.0	27.7	20 1	28 4	28.8	29.1	29.4	29.7	30.0	30.2	30.5
31.0 31.5	19.	3 20.1	3 2 2.0	23.1	24.0	24,8	22.2	20.1	20.7	27.2	20 1	20.1	20 6	20 4	29.7	30.1	30.4	30.7	30.5	31.2	31.4
32.0 32.5	20.	0 21•	5 22.8	23.9	24.8	25.0	20.3	27.0	27.0	20.1	20.0	20 6	20 6	30.3	30.7	31.0	31.3	31.6	31.9	32.2	32.4
33.0 33.5	20.	3 21.	9 23.	. 24.2	25.2	26.0	26 - /	27.4	20.0	20.0	20 5	20 0	30.4	30.8	31.1	31.5	31.8	32.1	32.4	4 32.7	32.9
34.0	21.	0 22.	6 23.9	25.0	26.0	26,8	27.0	28.3	20.7	27,7	20.7	30.7	31.3	31.7	32.1	32.4	32.8	33.1	33.4	4 33.6	33.9
34.5 35.0	21.	6 23.	3 24.0	25.8	20.0	21.0	20.7	27.	27.1	30.3	20.0		22	22 6	33.0	33.4	33.7	34.1	34	3 34.6	34.9
35.5 36.0	22. 22.	0 23. 3 24.	6 25.0 0 2 5.0	26.6	27.6	28.5	29.3	30.0	30.6	31.2	31.7	32.2	2 32.	7 33.1	33.5	33.9	34.2	34.5	34.1 35.1	8 35.1 3 35.6	35.4
36.5 37.0	22.	6 24.	3 25.	7 26.9	28.0	28.9	29.1	30.			26.2	32.	. 22	34 1	24.5	34.8	35.2	35.5	35.	8 36.	36.4
37.5	23.	3 25.	0 26.	5 27.7	7 28.5	3 29.7	30.5	31.	2 21 .	2 22 4 4	23.1	36	34	35.7	25.4	35.8	36.1	36.	36.	8 37.	37.4
38.0 38.5	24.	0 25.	8 27.	2 28.5	5 29.0	30.5	31.4	32.	1 22.0	9 99 • •	3710	371	3 E	E 25 9	34.4	26.7	37.1	37.4	37.	8 38.	1 38.4
39.0 39.5	24.	6 26.	5 28.	0 29.3	3 30.4	4 31.4	32.4	99.		7 37 63	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	35	0 34	. 36	27.2	37.7	38.	38.	4 38.	7 39.	1 39.3
40.0 40.5	25.	0 26.	8 28.	4 29.	7 30 . 9	0 31.0	32.1	22.	7 37.		3.8	36	. 24	9 37	2 27.8	38.5	38.6	38.	939.	2 39.	5 39.8
41.0	25.	6 27.	5 29.	1 30.	5 31.0	6 32.0	33.2	34.	9 99.	0 330	30.	7 37	2 27	0 38	2 28.7	39.1	39.	39.	9 40.	2 40.	5 40.8
41.5 42.0	26.	3 28.	3 29.	9 31.	3 32.	4 33.3	34.7		2 37.			7 30	3 3 R	8 39	29.7	40-1	40.	5 40.	9 41.	2 41.	5 41.8
42.5 43.0	26 · 27 ·	6 28. 0 29.	6 30.	3 31.0 6 32.0	6 32. 0 33.	8 33.7 2 34.3	35.2	36.	1 36.	8 37	38.	1 38,	7 39.	2 39.	7 40.2	40.6	41.	0 41.	3 41. 8 42.	7 42.	0 42.3 5 42.8
43.5	27.	3 29.	4 31.	0 32.	4 33.	7 34.7	, 35	, ,,,	2 27.	J JO **	. 20.	. 20	4 40	2 40	7 41 1	41	5 41.	9 42.	3 42.	7 43.	0 43.3
44.0 44.5	28,	.0 30	1 31.	8 33.	2 34.	5 35,0	30.	310	4 30.	4 30 •	7 371	2 4U.	5 41	1 41.	6 42.	42.	5 42.	9 43.	3 43.	6 44.	0 44.3
45.0 45.5	28.	,7 30,	.8 32.	6 34.	0 35.	3 30.4	3/1		3 37.	5 /5	2 60	7 71. 0 41	5 43	A 42	43.	43.	5 43.	9 44.	3 44.	6 45.	0 45.3
46.0 46.5	29.	.0 31	.2 32.	9 34.	4 35.	7 30.0	3 7 .	30.	/ 37.	9 40.	2 70.	7 744	9 42	5 42.	0 43.	5 43.	9 44.	4 44.	8 45.	1 45.	5 45.8
47.0	29.	.7 31	.9 33.	7 35.	2 30.	3 3 (.	7 38.	1 37.	0 40.	4 41.	1 71.	2 42	0 43	4 44	0 44.	44.	9 45.	3 45.	7 46	.1 46.	4 46.8
47.5 48.0	30	. 4 32	.6 34.	5 36.	0 37.	4 38 .	37.	9 40.	2 41.	3 42.	0 72.		0 //		0 / 5	4 45	9 4A.	2 46.	7 47.	.1 47.	4 47.8
48.5 49.0	30 31	.8 33 .1 33	·0 34.	2 36.	8 38.	2 39	4 40.	4 41	3 42.	2 42.	9 43.	6 44.	3 44.	9 45.	4 45.	9 46.	4 46. B 47.	8 47.	2 47	.6 47. .1 48.	9 48.3
49.5	31	.5 33	.8 35.	6 37.	2 38.	6 39.	8 40. 2 41.	8 41. 3 42.	8 42.	1 43.	4 44. 9 44.	1 44. 6 45.	2 45	8 46.	4 46.	9 47.	3 47.	8 48	2 48	.6 48	4 48.8 9 49.2
50.0	21	54			·•																

STUMP DOB	0.0 0.2 0.4	0.6 0.8 1.0	STUMP 1.2 1.4 1.6	HEIGHT (IN F		2.8 3.0 3.2	3,4 3.6 3.8 4.0	-0
5.0 5.5	3.4 3:5 3.7 3.7 3.9 4.0		4.1 4.1 4.2 4.5 4.5 4.6		4.4 4.5 4.5 4.9 4.9 5.0		5.2 5.3 5.3 5.4	4
6.0 6.5	4.0 4.2 4.4 4.4 4.6 4.7	4.9 5.0 5.1	4.9 5.0 5.0 5.3 5.4 5.5	5 5.6 5.6	5.3 5.4 5.4 5.7 5.8 5.9	6.0 6.0 6.1	6.2 6.2 6.3 6.0	4
7.0 7.5	4.7 4.9 5.1 5.0 5.2 5.4	5.6 5.8 5.9	5.6 5.8 5.9 6.0 6.2 6.3	6.4 6.5	6.2 6.3 6.3 6.6 6.6 6.7 6.8	6.4 6.5 6.6	7.1 7.2 7.3 7.	3
8.0 8.5	5.3 5.6 5.8 5.7 5.9 6.1	6.3 6.5 6.7	6.4 6.6 6.7	7.2 7.4	7.0 7.1 7.2 7.5 7.6 7.7	7.8 7.9 8.0	8.1 8.1 8.2 8.3	3
9.0 9.5	6.0 6.2 6.5 6.3 6.6 6.8	7.1 7.3 7.4	7.2 7.4 7.5	8.1 5.2	7.9 8.0 8.1 8.3 8.5 8.6	8.7 8.8 8.9	9.0 9.1 9.2 9.3	3
10.0 10.5	6.6 6.9 7.2 6.9 7.2 7.5	7.8 8.0 8.2	8.0 8.2 8.3 8.4 8.6 8.7	7 8.9 9.1	8.8 8.9 9.0 9.2 9.3 9.5	9.6 9.7 9.8	9.9 10.0 10.2 10.	3
11.0 11.5	7.2 7.6 7.9 7.6 7.9 8.2	8.5 8.7 9.0	8.8 9.0 9.1 9.2 9.4 9.6	5 9.7 9.9 1	10.1 10.2 10.4		3 10.9 11.0 11.1 11.	2
12.0 12.5	7.9 8.2 8.5 8.2 8.6 8.9	9.2 9.5 9.7	9.9 10.2 10.4	4 10.6 10.7 1	10.9 11.1 11.2		11.8 11.9 12.1 12.	2
13.0 13.5	8.5 8.9 9.2 8.8 9.2 9.6	9.9 10.2 10.5	10.7 10.9 11.2	2 11.4 11.6 !	11.8 11.9 12.1	12.3 12.4 12.6	12.3 12.4 12.6 12.6 12.8 12.9 13.0 13.	. 2
14.0	9.4 9.8 10.2	10.6 10.9 11.2	11.5 11.7 12.0	12.2 12.4	12.6 12.8 13.0	13.2 13.4 13.5	1 13.2 13.4 13.5 13. 5 13.7 13.8 14.0 14. 5 14.2 14.3 14.5 14.	. 1
15.0 15.5 16.0	10.0 10.5 10.9	11.3 11.6 11.9	12.2 12.5 12.8	8 13.0 13.2	13.5 13.7 13.9	14.1 14.3 14.4	14.6 14.8 15.0 15. 9 15.1 15.3 15.4 15.	. 1
16.5	10.6 11.1 11.6	12.0 12.3 12.7	13.0 13.3 13.6	6 13.8 14.1	14.3 14.5 14.8	15.0 15.2 15.4	15.6 15.7 15.9 16. 3 16.0 16.2 16.4 16.	. 1
17.5 18.0	11.2 11.7 12.2	12.6 13.0 13.4	13.7 14.1 14.3	3 14.6 14.9 :	15.1 15.4 15.6	15.9 16.1 16.3	3 16.5 16.7 16.9 17. 7 16.9 17.1 17.3 17.	. 1
18.5	11.8 12.4 12.9	13.3 13.7 14.1	14.5 14.8 15.3	1 15.4 15.7	16.0 16.2 16.5	16.7 17.0 17.2	2 17.4 17.6 17.8 18.7 17.9 18.1 18.3 18.	.0
19.5	12.4 13.0 13.5	14.0 14.4 14.8	15.2 15.6 15.9	9 16.2 16.5 :	16.8 17.1 17.4	17.6 17.9 18.1	1 18.3 18.6 18.8 19. 5 18.8 19.0 19.3 19.	• 0
20.5	13.0 13.6 14.2	14.7 15.1 15.6	16.0 16.3 16.	7 17.0 17.4	17.7 17.9 18.2	18.5 18.8 19.0	0 19.3 19.5 19.7 20. 5 19.7 20.0 20.2 20.	• 0
21.5 22.0	13.8 14.5 15.1	15.7 16.2 16.6	17.1 17.5 17.5	9 18.2 18.6	18.9 19.2 19.5	19.8 20.1 20.4	9 20.2 20.4 20.7 20. 4 20.7 20.9 21.2 21.	. 4
22.5 23.0	14.4 15.1 15.7	16.3 16.8 17.3	17.8 18.2 18.0	6 19.0 19.4	19.7 20.1 20.4	20.7 21.0 21.3	8 21.1 21.4 21.6 21. 3 21.6 21.8 22.1 22.	. 4
23.5 24.0	14.9 15.7 16.4	17.0 17.5 18.0	18.5 19.0 19.0	4 19.8 20.2	20.5 20.9 21.2	21.6 21.9 22.	7 22.0 22.3 22.6 22. 2 22.5 22.8 23.1 23.	. 3
24.5 25.0	15.5_16.3 17.0	17.6 18.2 18.7	19.2 19.7 20.3	2 20.6 21.0	21.4 21.7 22.1	. 22.4 22.8 23.	6 23.0 23.3 23.5 23. 1 23.4 23.7 24.0 24.	. 3
25.5 26.0	16.0 16.8 17.6	18.2 18.9 19.4	19.9 20.4 20.9	9 21.4 21.8	22.2 22.6 23.0	23.3 23.7 24.0	6 23.9 24.2 24.5 24. 0 24.3 24.7 25.0 25.	. 3
26.5 27.0	16.6 17.4 18.2	18.9 19.5 20.1	20.7 21.2 21.	7 22.1 22.6	23.0 23.4 23.8	3 24.2 24.5 24.9	5 24.8 25.1 25.4 25. 9 25.3 25.6 25.9 26. 4 25.7 26.1 26.4 26.	• 2
27.5 28.0 28.5	17.1 18.0 18.8	3 19.5 20.2 20.8	21.4 21.9 22.	4 22.9 23.4	23.8 24.2 24.7	7 25.0 25.4 25.	8 26.2 26.5 26.9 27. 3 26.6 27.0 27.3 27.	• 2
29.0	17.6 18.6 19.4	20.1 20.8 21.5	22.1 22.6 23.	2 23.7 24.2	24.6 25.1 25.5	25.9 26.3 26.	7 27.1 27.4 27.8 28. 2 27.5 27.9 28.3 28.	٠2
30.0 30.5	18.1 19.1 20.0	20.8 21.5 22.1	22.8 23.4 23.	9 24.4 24.9	25.4 25.9 26.3	3 26.8 27.2 27.	6 28.0 28.4 28.8 29. 0 28.4 28.8 29.2 29.	. i
31.0 31.5	18.7 19.7 20.6	21.4 22.1 22.8	23.5 24.1 24.	7 25.2 25.7	26.2 26.7 27.2	2 27.6 28.1 28.	5 28.9 29.3 29.7 30. 9 29.4 29.8 30.2 30.	• 1
32.0 32.5	19.4 20.5 21.4	22.0 22.8 23.5	24.5 25.1 25.	8 26.3 26.9	27.4 27.9 28.4	28.9 29.4 29.	8 30.3 30.7 31.1 31.	. 5
33.0 33.5	19.7.20.8 21.7 19.9 21.0 22.0	7 22.6 23.4 24.1 5 22.9 23.7 24.5	24.8 25.5 26. 25.2 25.9 26.	1 26.7 27.3 5 27.1 27.7	27.8 28.3 28.9 28.2 28.8 29.3	29.3 29.8 30.3 3 29.8 30.3 30.	3 30.7 31.2 31.6 32. 7 31.2 31.6 32.1 32.	.0
34.0 34.5	20.4 21.6 22.6	23.5 24.3 25.1	25.9 26.6 27.	2 27.8 28.4	29.0 29.6 30.1	1 30.6 31.1 31.	2 31.6 32.1 32.5 33. 6 32.1 32.5 33.0 33.	. 4
35.0 35.5	20.9 22.1 23.1	L 24.1 25.0 25.8	26.5 27.3 27.	9 28.6 29.2	29.8 30.4 30.9	31.5 32.0 32.	1 32.5 33.0 33.5 33. 5 33.0 33.5 33.9 34.	. 4
36.0 36.5	21.4 22.6 23.7	7 24.7 25.6 26.4	27.2 28.0 28.	7 29.3 30.0	30.6 31.2 31.6	3 32.3 32.9 33.	9 33.4 33.9 34.4 34. 4 33.9 34.4 34.9 35.	. 4
37.0 37.5	21.9 23.1 24.2	2 25.3 26.2 27.1	27.9 28.6 29.	4 30.1 30.7	31.4 32.0 32.0	5 33.2 33.7 34.	8 34.3 34.9 35.3 35. 3 34.8 35.3 35.8 36. 7 35.2 35.8 36.3 36.	. 3
38.0 38.5 39.0	22.4 23.6 24.8	3 25.8 26.8 27.7	28.5 29.3 30.	1 30.8 31.5	32.2 32.8 33.4	4 34.0 34.6 35.	2 35.7 36.2 36.8 37.6 36.1 36.7 37.2 37.	. 3
39.5 40.0	22.8 24.2 25.3	3 26.4 27.4 28.3	29.2 30.0 30.	8 31.5 32.3	32.9 33.6 34.7	2 34.8 35.4 36.	0 36.6 37.2 37.7 38. 5 37.0 37.6 38.2 38.	• 2
40.5	23.3 24.7 25.9	9 27.0 28.0 29.0 1 27.3 28.3 29.3	29.9 30.7 31.	5 32.3 33.0 9 32.6 33.4	33.7 34.4 35.6 34.1 34.8 35.5	35.7 36.3 36. 36.1 36.7 37.	9 37.5 38.1 38.6 39. 3 37.9 38.5 39.1 39.	· 2
41.5 42.0	23.7 25.2 26.4	4 27.5 28.6 29.6 7 27.8 28.9 29.9	30.5 31.4 32. 30.8 31.7 32.	2 33.0 33.8 6 33.4 34.1	34.5 35.2 35.° 34.9 35.6 36.	9 36.5 37.2 37. 3 36.9 37.6 38.	8 38.4 39.0 39.6 40. 2 38.8 39.4 40.0 40.	.6
42.5 43.0	24.2 25.6 26.9 24.4 25.9 27.2	9 28.1 2 9.2 30.2 2 28.4 29.5 30.5	31.2 32.0 32. 31.5 32.4 33.	9 33.7 34.5 3 34.1 34.9	35.3 36.0 36. 35.6 36.4 37.	7 37.4 38.0 38. 1 37.8 38.4 39.	7 39.3 39.9 40.5 41.1 39.7 40.4 41.0 41.	•1
43.5 44.0	24.9 26.4 27.7	7 28.9 30.1 31.1	32.1 33.1 33.	9 34.8 35.6	36.4 37.2 37.	9 38.6 39.3 40.	5 40.2 40.8 41.4 42. 0 40.6 41.3 41.9 42.	. 5
44.5 45.0	25.3 26.8 28.2	2 29.5 30.6 31.7	32.8 33.7 34.	6 35.5 36.4	37.2 37.9 38.	7 39.4 40.1 40.	4 41.1 41.7 42.4 43.8 41.5 42.2 42.8 43.	. 5
45.5 46.0	25.7 27.3 28.7	7 30.0 31.2 32.3	33.4 34.4 35.	3 36.2 37.1	37.9 38.7 39.	5 40.3 41.0 41.	3 42.0 42.6 43.3 43.7 42.4 43.1 43.8 44.	. 4
46.5 47.0	26.2 27.8 29.2	2 30.6 31.8 32.9	34.0 35.0 36.	0 36.9 37.8	38.7 39.5 40.	3 41.1 41.8 42.	1 42.9 43.6 44.2 44 6 43.3 44.0 44.7 45 0 43.7 44.5 45.2 45	. 4
47.5 48.0 48.5	26.6 28.2 29.7	7 31.1 32.4 33.5	34.6 35.7 36.	7 37.6 38.5	39.4 40.3 41.	1 41.9 42.7 43.	5 44.2 44.9 45.6 46 9 44.6 45.4 46.1 46	. 3
49.0 49.5	27.0 28.7 30.2	2 31.6 32.9 34.1	35.3 36.3 37.	4 38.3 39.3	40.2 41.1 41.	9 42.7 43.5 44.	3 45.1 45.8 46.6 47 7 45.5 46.3 47.0 47	.3
50.0	27.4 29.2 30.7	7 32.1 33.5 34.7	35.9 37.0 38.	0 39.0 40.0	40.9 41.8 42.	7 43.6 44.4 45.	2 46.0 46.7 47.5 48	. 2

	E,	QUA I I C	JN E21	IMAIES																
STUMP DOB	0.0 0.2	0.4	0.6	0.8	.0 1	.2 1	STUN	1P HE	GHT (2.0	2.2	2.4	2.6						3.8	4.0
5.0	3.2 3.4	3.5 3.9									4.4 4.9	4.5 4.9		5.1	5.1	5.2	5.2	5.3	5.3	5.4
5.5 6.0	3.5 3.7 3.8 4.0	4.2	4.4	4.6	4.7 4	.8 4	. 9	5.0	5.1		5.3 5.7	5.4 5.8					5.7 6.2	5.8 6.2	5.8 6.3	5.9 6.4
6.5 7.0	4.1 4.4	4.6							5.0	6.1	6.2	6.3	6.4	6.4	6.5		6.7 7.1	6.7 7.2	6.8 7.3	6.9 7.3
7.5	4.7 5.0	5.3	5.5			-					6.6 7.1	6.7 7.2				7.5	7.6	7.7	7.8	7.8
8.0 8.5	5.0 5.3 5.3 5.7	5.6 6.0	6.2	6.4	6.6	5,8	7.0	7.1	7.2		7.5 7.9	7.6 8.0	7.7 8.2		7.9 8.4	8.0 8.5	8.1	8.2 8.6	8.2 8.7	8.3 8.8
9.0 9.5	5.6 6.0 5.9 6.3	6.3	6.6 6.9						8.1	8.2	8.4	8.5	8.6	8.7	8.8	8.9	9.0	9.1 9.6	9.2	9.3 9.8
10.0	6.2 6.7	7.0	7.3	7.5	7.8					8.7 9.1	8.8 9.2	8.9 9.4	9.1 9.5	9.6	9.3 9.8	9.4	0.0	10.1	10.2	10.3
10.5 11.0	6.6 7.0	7.3 7.7	7.6 8.0	8.3	8.5	8.8	9.0	9.2	9.3	9.5	9.7	10.3	10.0 1	0.5 1	0.7 1	0.8	10.9	11.0	11.1	11.5
11.5	7.2 7.6 7.5 7.9	8.0	8.3 8.7								A E	107	10.9 1	11.0 1	1.1 1	1.3	Li.4	11.0	11.0	1101
12.0 12.5	7.8 8.3	8.7	9.1	9.4	9.7								11.3							
13.0 13.5	8.1 8.6 8.3 8.9	9.0 9.4	9.8	10.1 1	0.4 1	0.7 1	1.0 1	1.2 1	1.4	1.0	11.0	12.0	12 6	12.8	3.0	3.1	13.3	13.4	13.6	13.7
14.0	8.6 9.2	9.7	10.1	10.5 1	0,8 1	1.1 1	1.4 1	1.0 1	1.7	2.1	2.2	12.0	12 1	2.3	3.4	3.6	13.8	13.9	14.0	14.2
14.5 15.0	9.2 9.8	10.4	10.8	11.2 1	1.0 1	1.9 1	2.2 1	2.7	201	2 2	13.4	12.0	14.0	14.2	4.4	14.5	14.7	14.9	15.0	15.2
15.5 16.0	9.8 10.5	11.0	11.5	11.9 1	2.3 1	2.0 1	2.0 1	3.2 1	2.2			14.4	14 0	15.1	5.3	15.5	15.6	15.8	16.0	16.1
16.5	10.1 10.8	11.4	11.8	12.3 1	.2./ 1	3.0 T	2 . 2 1	, , , , ,				18 1	15 2	4.5	5.7	15.9	16.1	16.3	16.4	16.6
17.0 17.5	10.7 11.4	12.0	12.5	19.0 1	3 4 L	3.0 1	7.1	7.7		E /	5 7	16.0	16.2	16.4	16.6	16.8	17.0	17.2	17.4	17.6
18.0 18.5	11.3 12.0	12./	13.2	13./ 1	1402 I	4.0 I	407	2.3				16 8	17 1	17.3	£7.6	17.8	18.0	18.2	18.4	18.6
19.0	11.6 12.3	13.0	13.6	14.1	14.2 1	4.7	2.2	301	4 4	14.7	17.0	17 2	7.5	17.8	18:.0	18.2	18.4	18.7	18.9	19.0
19.5 20.0	12.1 12.9	13.6	14.2	14.8	12.3 1	,2 • / 1		10.0			.7 0	19 1	18 4	18.7	18.9	19.2	19.4	19.6	19.8	20.0
20.5 21.0	12.4 13.3 12.7 13.6	14.0	14.6	15.1 15.5	16.0 1	6.4 1	6.9	17.3	17.6	17.9	18.3	18.6	18.8	19.1	19.4	19.6	19.9	20.1	20.3	20.5
21.5	13.0 13.9	14.6	15.3	15.8	10.4	10.0 7	. 1 • 2 .	17.0	10.0	10.4	10 1	10 4	10 7	20.0	20.3	20.5	20.8	21.0	21.3	21.5
22.0 22.5	13.5 14.5	15.3	15.9	16.5	1/.1 1	17.0		10.4	10.0	10.4	20.0	20 3	20.6	20.9	21.2	21.5	21.7	22.0	22.2	22.4
23.0 23.5	13.8 14.8 14.1 15.1	15.6 15.9	16.3	17.2	17.8	18.3	18.8	19.2	19.6	20.0	20.4	20.7	21.0	21.3	21.6	21.9	22.2	22.4	22.7	22.9
24.0	14.4 15.4	16.2	16.9	17.0	10.2	10.1	7 • 2	17.0	20.0	2011	2010	21 6	21.9	22.2	22.5	22.8	23.1	23.4	23.7	23.9
24.5 25.0	14.9 T6.0	16.8	17.6	18.3	18.9	19.4	17.7	20.4	2017	21.2	21.0	22 4	22 8	23.1	23.5	23.8	24.1	24.3	24.6	24.9
25.5 26.0	15.2 16.3	17.2	17.9	18.6	19.2	19.0	20.5	20.0	21.3	22.	22 6	22 0	23 2	23.6	23.9	24.2	24.5	24.8	25.1	25.4
26.5	15.7 16.9	17.8	18.0	14.2	20.0	20.0	21.1	21.0		20.0	23 3	23 7	94 1	24.5	24.8	25.1	25.5	25.8	26.0	26.3
27.0 27.5	16.3 17.4	18.4	19.3	20.0	20.7	21.5	21.9	22.4	26.7	23.7	24.2	24 4	25 0	25.3	25.7	26.1	26.4	26.7	27.0	27.3
28.0 28.5	16.6 17.7	7 18.7	19.6	20.3	21.0	21.1	~~~	22.0	2212	24.1	24 6	25 0	25.4	25.8	26.2	26.5	26.8	27.2	27.	27.8
29.0	17.1 18.3	3 19.3	20.2	21.0	21.7	22.4	23.0	23.7	27.1	27.5	25.0	25 0	26 3	24.7	27.1	27.4	27.8	28.1	28.4	28.8
29.5 30.0	17.6 18.9	₹ 20.0	20.9	21.7	26.3	22 · L	2301	27.0	25.3	25 0	24.2	26.7	7 27 1	27.6	28.0	28.3	28.7	29.1	29.4	4 29.7
30.5 31.0	17.9 19.7	2 20.3	21.2	22.0	22.0	20.0	27.1	27.	25.2	24.2	26 7	27.1	27.6	28.0	28.4	28.8	29.2	29.5	5 29.9	9 30.2
31.5	18.4 19.4	B 20.9	21.9	22.7	23.5	24,2	24.9	22.3	20.0	20.0	27 5	200	28 4	28.9	29.3	29.7	30.1	30.5	5 30.	8 31.2
32.0 32.5	19.0 20.	3 21.5	22.5	23.4	24.2	24.9	73.0	20.3	20.0	2117	2100		30.3	30 B	30 2	30.6	31.0	31.4	4 31.	8 32.1
33.0	19.2 20.0	6 21.8	3 22.8	23.7	24.0	22.3	20.0	20.0	21.6	20.0	2012	, 20	20 7	30.2	30.6	31.1	31.5	31.9	9 32.	3 32.6
33.5 34.0	19.7 21.	2 22.4	+ 23.2	24.4	23.2	20.0	20.		20.0	20.0	20 4	30	20 6	31.1	31.5	32.0	32.4	32.	B 33.	2 33.6
34.5 35.0	20.2 21.	7 23.0	24.1	25.1	25.9	20./	27.5	20.2	20.0	20.0	30.0	30.	21.5	32.0	32.4	32.9	33.3	33.1	8 34.	2 34.6
35.5 36.0	20.5 22.	0 23.3	3 24.4	25.4	20.3	2/.1	21.9	20.5	27.2	2710	30.	21	. 21 9	22.4	32.9	33.3	33.8	34.2	2 34.	6 35.0
36.5	21.0 22.	6 23.	9 25.0	26.1	21.0	21.0	20.0	47.5	20.0	30.0			9 22 7	22.2	33.8	34.2	34.	7 35.	2 35.	6 36.0
37.0 37.5	21.5 23.	1 24.	5 2 5. 7	26.7	2/*/	20.5	27.3	20 • I	30.0	31.4		222	- 22 6	34 1	34 7	25.2	35.6	5 36.	1 36.	5 37.0
38.0 38.5	21.8 23.	4 24.	8 26.0	27.0	28.0	28.9	29.1	30.7	2111	21.0	22	22	4 34 0	34.6	35.1	35.6	36.	1 36.	6 37.	0 37.5
39.0	22.3 23.	9 250	4 ZD.0	21.1	20.1	27.0	30.4	51.2		22.		7 34	2 24 9	35.4	36.0	36.5	37.	0 37.	5 38.	0 38.4
39.5 40.0	22.8 24.	5 Z5.	9 21.2	20.3	27.4	30.3	21.6	32.0	22.					24.3	36.9	27.4	37.	938.	4 38.	9 39.4
40.5	23.0 24.	7 20.	2 2/.5	20.1	27.1	30.0	21.0	32.5	330	3/ 0		0 3 5	5 26 2	24.7	37.2	37.9	38.	4 38.	9 39.	4 39.9
41.0 41.5	23.5 25.	3 20.	8 28.1	27.3	30.4	21.2	34.6	22.1	3347	3 -	3.5	7 26	4 37 (37.6	38.2	38.	839.	339.	8 40.	3 40.8
42.0 42.5	24.0 25.	B 2/.	4 25.	29.7	21.0	32.0	33.0	33.0	37.00	2.5	3.4	5 37	2 27 1	28.5	39.	1 39.	7 40.	2 40 •	8 41	3 41.8
43.0	24.2 26.	1 2/.	/ 29.0) 30.3	31.4	32.7	2212	37.2	32.0	24	. 34	0 27	A 38 :	2 28.9	39.	5 40.	1 40.	7 41.	2 41	8 42.3
43.5 44.0	24.7 26.	,6 Z8.	2 29.0	30.7	32.0	32.1	27.0	34.7	32.0	341		7 29	4 20	1 29.5	40.	4 41 -	0 41.	6 42 .	2 42	.7 43.2
44.5 45.0	25.0 26.	,9 28.	5 29.9	31.2	32.4	33.4	34.4	99.9	30.2	27		38	9 39	5 40.5	40.1	B 41.	5 42.	1 42 .	6 43	.2 43.7
45.5	25.4 27.	.4 29.	1 30 - 3	5 31.8	33.0	34.1	32.1	30.0	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			0 30	7 40	4 41.	41.	7 42.	4 43.	0 43.	6 44	•1 44•7
46.0 46.5	25.9 27	.9 29.	6 31.	1 32 • 3	33.1	34.0	33.0	30.0	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	30.	0 20	7 40	B 41	2 41.	9 42.	6 43.	2 43.	9 44.	.5 45	.1 45.6
47.0	26.1 28.	•2 29•	9 31	4 32.0	34.0	32.1	30.2		0	30.			9 /1	6 43.	4 43.	0 43.	7 44.	3 44	.9 45	•5 46•
47.5 48.0	26.6 28	.7 30.	5 32.	0 33•4	34.7	35.0	30.7	, 31.0	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	, ,,,,	. 701	0 41	7 /2	5 43-	. 43.	9 44.	6 45.	2 45	.9 46	.5 47.
48.5 49.0	27.1 29	.2 31	.0 32.	5 34 . (, ,,,,	20.0	37.00	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		72.	- 7:	- /-	E / 2	2 44	1 44	0 45	5 46.	. 2 46	-a 47	.4 48.0
49.5	27.1 29 27.3 29 27.5 29	.5 31	3 32.	9 34.3	35.7 7 36 0	36.8	37.9 38.3	39.0 3 39.1	39.9 3 40.3	9 40. 3 41.	9 41. 2 42.	1 42	9 43.	7 44.	5 45.	2 45.	9 46	6 47	.3 47	.9 48.
50.0	21,3 29	. 1 31,	, o , , , ,	٠, ٢,		, ,,,,		7 • ·		•	-,		•							

STUMP DOB	0.0	0.2	0.4	0.6	0.8	1.0	1.2	S	1.6	1EIGH1	(IN 2.0	FEET?	2.4	2.6	2.8	3.0	3.2	3,4	3,6	3.8	4.0
5.0 5.5	3.3 3.6	3.5 3.9	3.7 4.0	3.8 4.2	3.9 4.3	4.0	4.1 4.5	4 • 2 4 • 6	4.3 4.7	4.4 4.8	4.4 4.9	4.5 5.0	4.6	4.6 5.1	4.7 5.1	4.7	4.8 5.2	4.8 5.3	4.8 5.3	4.9 5.4	4.9
6.0	4.0	4 - 2	4.4	4.6	4.7	4.8	5.0	5 • 1	5.2	5.2	5.3	5.4	5.5	5.5	5.6	5.2 5.6	5.7	5.8	5.8	5.9	5.4 5.9
6.5 7.0	4.3	4.5	4.8 5.1	4.9 5.3	5.1 5.5	5.2 5.6	5.4 5.8	5.5 5.9	5.6 6.0	5.7 6.1	5.8	5.8 6.3	5.9 6.4	6.0	6.1	6.1	6.2	6.2	6.3	6.3	6.4
7.5	4.9	5.2	5.5	5.7	5.9	6.0	6.2	6.3	6.4	6.5	6.6	6.7	6.8	6.9	7.0	7.1	7.1	7.2	7.2	7.3	7.4
8.0 8.5	5.2 5.6	5.6 5.9	5.8 6.2	6.1	6.2	6.8	6.6 7.0	6.7 7.1	6.8 7.3	7.0 7.4	7.1 7.5	7.2 7.6	7.3 7.7	7.4 7.8	7.4 7.9	7.5 8.0	7.6 8.1	7.7 8.1	7,7 8,2	7.8 8.3	7.9 8.3
9.0 9.5	5.9 6.2	6.6	6.5	6.8 7.2	7.0 7.4	7.2 7.6	7.4 7.8	7.5 8.0	7.7 8.1	7.8 8.2	7.9 8.4	8.1	8.2	8.3	8.4	8.4	8.5 9.0	8.6 9.1	8.7 9.2	8.8 9.3	8.8
10.0	6.5	6.9	7.2	7.5	7.8	8.0	8.2	8.4	8.5	8.7	8.8	8.9	9.1	9.2	9.3	9.4	9.5	9.6	9.7	9.7	9.8
10.5	6.8 7.1	7.2	7.6 7.9	7.9 8.2	8.1 8.5	8.4	8.6 9.0	8 · 8 9 · 2	8.9 9.4	9.1 9.5	9.2 9.7	9.4	9.5	9.6	9.7	9.8	9.9	10.0			
11.5	7.4 7.7	7.9 8.2	8.3 8.6	8.6	8.9 9.3	9.1	9.4	9.6	9.8		10.1	10.3	10.4	10.5	10.7	10.8	10.9	11.0	11.1	11.2	11.3
12.5	8.0	8.5	9.0	9.3	9.6	9.9	10.2	10.4	10.6	10.8	11.0		11.3	11.4	11.6	11.7	11.8	11.9	12.0	12.2	12.3
13.0 13.5	8.3 8.6	8.9 9.2	9.3	9.7	10.0	10.3	10.6	10.8	11.0	11.2	11.4	11.6	11.7	11.9	12.0	12.2	12.3	12.4	12.5	12.6	12.7
14.0 14.5	8.9 9.2		10.0	10.4	10.8	11.1	11.3	11.6	11.8	12.1	12.3	12.4	12.6	12.8	12.9	13.1	13.2	13.4	13.5	13.6	13.7
15.0	9.5	10.2	10.7	11.1	11.5	11.8	11.7	12.4	12.7	12.9	13.1	13.3	13.5	13.7	13.8	14.0	14.2	14.3	14.4	14.6	14.7
15.5 16.0	9.8	10.5	11.0	11.5	11.9	12.2	12.5	12.8	13.1	13.3	13.5	13.7	13.9	14.1	14.7	14.5	14.6	14.8	14.9	15.1	15.2
16.5	10.4	11.1	11.7	12.2	12.6	13.0	13.3	13.6	13.9	14.1	14.4	14.6	14.8	15.0	15.2	15.4	15.6	15.7	15.9	16.0	16.2
17.0 17.5							13.7														
18.0 18.5	11.3	12.1	12.7	13.2	13.7	14.1	14.5 14.8	14.8	15.1	15.4	15.6	15.9	16.1	16.3	16.6	16.8	16.9	17.1	17.3	17.5	17.6
19.0	11.9	12.7	13.3	13.9	14.4	14.8	15.2	15.6	15.9	16.2	16.5	16.8	17.0	17.2	17.5	17.7	17.9	18.1	18.2	18.4	18.6
19.5 20.0							15.6														
20.5	12.7	13.6	14.3	14.9	15.5	15.9	16.4	16.7	17.1	17.4	17.7	18.0	18.3	18,6	18.8	19.0	19.3	19.5	19.7	19.9	20.1
21.0 21.5	13.3	14.2	15.0	15.6	16.2	16.7	16.7 17.1	17.5	17.9	18.3	18.6	18.9	19.2	19.4	19.7	19.9	20.2	20.4	20.6	20.8	21.0
22.5 22.5	13.6	14.5	15.3	15.9	16.5	17.0	17.5 17.9	17.9	18.3	18.7	19.0	19.3	19.6	19.9	20.1	20.4	20.6	20.9	21.1	21.3	21.5
23.0	14.1	15.1	15.9	16.6	17.2	17.8	18.2	18.7	19.1	19.5	19.8	20.2	20.5	20.8	21.0	21.3	21.6	21.8	22.0	22.3	22.5
23.5 24.0	14.7	15.7	16.6	17.3	17.9	18.5	18.6 19.0	19.5	19.9	20.3	20.7	21.0	21.3	21.6	21.9	22.2	22.5	22.7	23.0	23.2	23.5
24.5 25.0	15.0	16.0	16.9	17.6	18.3	18.8	19.4	19.8	20.3	20.7	21.1	21.4	21.8	22.1	22.4	22.7	22.9	23.2	23.5	23.7	23.9
25.5	15.5	16.6	17.5	18.3	18.9	19.6	19.7	20.6	21.1	21.5	21.9	22.3	22.6	22.9	23.3	23.6	23.9	24.1	24.4	24.7	24.9
26.0 26.5							20.5														
27.0	16.3	17.5	18.4	19.2	20.0	20.6	21.2	21.7	22.2	22.7	23.1	23.5	23.9	24.3	24.6	24.9	25.2	25.5	25.8	26.1	26.4
27.5 28.0	16.9	18.0	19.0	19.9	20.7	21.3	21.6	22.5	23.0	23.5	23.9	24.3	24.7	25.1	25.5	25.8	26.1	26.5	26.8	27.1	27.3
28.5 29.0	17.1	18.3	19.3	20.2	21.0	21.7	22.3	22.9	23.4	23.9	24.3	24.8	25.2	25.6	25.9	26.3	26.6	26.9	27.2	27.5	27.8
29.5	17.6	18.9	20.0	20.9	21.7	22.4	23.0	23.6	24.2	24.7	25.1	25.6	26.0	26.4	26.8	27.2	27.5	27.8	28.2	28.5	28.8
30.0 30.5							23.4 23.7														
31.0 31.5	18.4	19.7	20.9	21.8	22.7	23.4	24.1	24.7	25.3	25.9	26.4	26.8	27.3	27.7	28.1	28.5	28.9	29.2	29.6	29.9	30.2
32.0	18.9	20.3	21.5	22.4	23.3	24.1	24.8	25.5	26.1	26.6	27.2	27.7	28.1	28.6	29.0	29.4	29.8	30.2	30.5	30.4	31.2
32.5 33.0							25.2														
33.5	19.7	21.1	22.3	23.4	24.3	25.1	25.9	26.6	27.2	27.8	28.4	28.9	29.4	29.8	30.3	30.7	31.1	31.5	31.9	32.3	32.6
34.0 34.5	20.2	21.7	22.9	24.0	25.0	25.8	26.2	27.3	28.0	28.2	29.2	29.7	30.2	30.3	31.2	31.2	31.0	32.5	32.4		33.1 33.6
35.0 35.5	20.4	21.9	23.2	24.3	25.3	26.2	26.9 27.3	27.7	28.3	29.0	29.6	30.1	30.6	31.1	31.6	32.1	32.5	32.9	33.3	33.7	34.1
36.0	20.9	22.5	23.8	24.9	25.9	26.8	27.6	28.4	29.1	29.7	30.3	30.9	31.5	32.0	32.5	32.9	33.4	33.8	34.3	34.7	35.1
36.5 37.0							28.0 28.3														
37.5 38.0	21.6	23.3	24.6	25.8	26.9	27.8	28.7	29.5	30.2	30.9	31.5	32.1	32.7	33.2	33.8	34.3	34.7	35.2	35.7	36.1	36.5
38.5	22.1	23.8	25.2	26.4	27.5	28.5	29.4	30.2	30.9	31.6	32.3	32.9	33.5	34.1	34.6	35.1	35.6	36.1	36.6	37.0	37.5
39.0 39.5							29.7 30.1														
40.0	22.8	24.6	26.0	27.3	28.5	29.5	30.4	31.3	32.0	32.8	33.5	34.1	34.8	35.3	35.9	36.5	37.0	37.5	38.0	38.4	38.9
40.5 41.0	23.3	25.1	26.6	27.9	29 • 1	30.1	30.7 31.1	32.0	32.8	33.5	34.3	34.9	35.6	36.2	36.8	37.3	37.9	38.4	38.9	39.4	39.9
41.5 42.0							31.4														
42.5	23.9	25.8	27.4	28.8	30.0	31.1	32.1	33.0	33.9	34.7	35.4	36.1	36.8	37.4	38.1	38.6	39.2	39.8	40.3	40.8	41.3
43.0 43.5							32.4 32.8														
44.0 44.5	24.6	26.6	28.2	29.7	30.9	32.1	33.1	34.1	34.9	35.8	36.6	37.3	38.0	38.7	39.3	39.9	40.5	41.1	41.7	42.2	42.7
45.0	25.1	27 • 1	28.8	30.2	31.5	32.7	33.4	34.8	35.7	36.5	37.3	38.1	38.8	39.5	40.2	40.8	41.4	42.0	42.6	43.2	43.7
45.5 46.0							34·1 34·4														
46.5	25.7	27.8	29.5	31.1	32.4	33.6	34.8	35.8	36.7	37.6	38.5	39.3	40.0	40.8	41.4	42.1	42.8	43.4	44.0	44.6	45.1
47.0 47.5	26.1	28.3	30.1	31.6	33.0	34.3	35.1 35.4	36.5	37.4	38.4	39.2	40.0	40.8	41.6	42.3	43.0	43.6	44.3	44.9	45.5	46.1
48.0 48.5	26.3	28.5	30.3	31.9	33.3	34.6	35.7 36.1	36.8	37.8	38.7	39.6	40.4	41.2	42.0	42.7	43.4	44.1	44.7	45.4	46.0	46.6
49.0	26.8	29.0	30.8	32.5	33.9	35.2	36.4	37.5	38,5	39.5	40.4	41.2	42.0	42.8	43.6	44.3	45.0	45.6	46.3	46.9	47.5
49.5 50.0							36.7 37.0														

	EAGUITUM ESITUATES DE D'O'U' DE SIONE DES MAN SIONE METONI LAN CUINKALIN DAK	
STUMP DOB	0.0 0.2 0.4 0.6 0.8 1,0 1.2 1.4 1.6 1.8 2.0 2.2 2.4 2.6 2.8 3.0 3.2 3.4 3.6 3.8	4.0
5.0	3.5 3.8 3.9 4.1 4.2 4.3 4.4 4.4 4.5 4.6 4.6 4.7 4.7 4.8 4.8 4.8 4.9 4.9 4.9	4.9
5.5 6.0	3.9 4.1 4.3 4.5 4.6 4.7 4.8 4.9 4.9 5.0 5.1 5.1 5.2 5.2 5.3 5.3 5.3 5.4 5.4 5.4 5.4 4.2 4.5 4.7 4.9 5.0 5.1 5.2 5.3 5.4 5.5 5.5 5.6 5.6 5.7 5.7 5.8 5.8 5.8 5.8 5.9 5.9	5.4 5.9
6.5	4.6 4.9 5.1 5.3 5.4 5.5 5.6 5.7 5.8 5.9 6.0 6.0 6.1 6.2 6.2 6.2 6.3 6.3 6.4 6.4	6.4
7.0 7.5	4.9 5.2 5.5 5.7 5.8 6.0 6.1 6.2 6.3 6.4 6.4 6.5 6.6 6.6 6.7 6.7 6.8 6.8 6.9 6.9 5.3 5.6 5.8 6.1 6.2 6.4 6.5 6.6 6.7 6.8 6.9 7.0 7.0 7.1 7.2 7.2 7.3 7.3 7.3 7.4	6.9 7.4
8.0	5.6 6.0 6.2 6.5 6.6 6.8 6.9 7.1 7.2 7.3 7.3 7.4 7.5 7.6 7.6 7.7 7.7 7.8 7.8 7.9	7.9
8.5 9.0	6.0 6.3 6.6 6.8 7.0 7.2 7.4 7.5 7.6 7.7 7.8 7.9 8.0 8.0 8.1 8.2 8.2 8.3 8.3 8.4 6.3 6.7 7.0 7.2 7.5 7.6 7.8 7.9 8.0 8.2 8.3 8.3 8.4 8.5 8.6 8.6 8.7 8.8 8.8 8.9	8.4 8.9
9.5	6.7 7.1 7.4 7.6 7.9 8.1 8.2 8.4 8.5 8.6 8.7 8.8 8.9 9.0 9.0 9.1 9.2 9.2 9.3 9.3	9.4
10.0 10.5	7.0 7.4 7.8 8.0 8.3 8.5 8.6 8.8 8.9 9.1 9.2 9.3 9.4 9.4 9.5 9.6 9.7 9.7 9.8 9.8 7.3 7.8 8.1 8.4 8.7 8.9 9.1 9.2 9.4 9.5 9.6 9.7 9.8 9.9 10.0 10.1 10.1 10.2 10.3 10.3	9.9
11.0	7.7 8.1 8.5 8.8 9.1 9.3 9.5 9.7 9.8 9.9 10.1 10.2 10.3 10.4 10.5 10.5 10.6 10.7 10.8 10.8	10.9
11.5	8.0 8.5 8.9 9.2 9.5 9.7 9.9 10.1 10.3 10.4 10.5 10.6 10.7 10.8 10.9 11.0 11.1 11.2 11.2 11.3 8.3 8.9 9.3 9.6 9.9 10.1 10.3 10.5 10.7 10.8 11.0 11.1 11.2 11.3 11.4 11.5 11.6 11.7 11.7 11.8	
12.5 13.0	8.7 9.2 9.6 10.0 10.3 10.5 10.8 11.0 11.1 11.3 11.4 11.6 11.7 11.8 11.9 12.0 12.1 12.1 12.2 12.3	12.3
13.5	9.4 9.9 10.4 10.8 11.1 11.4 11.6 11.8 12.0 12.2 12.3 12.5 12.6 12.7 12.8 12.9 13.0 13.1 13.2 13.3	13.3
14.0 14.5	9.7 10.3 10.8 11.2 11.5 11.8 12.0 12.2 12.4 12.6 12.8 12.9 13.1 13.2 13.3 13.4 13.5 13.6 13.7 13.8 10.0 10.6 11.1 11.5 11.9 12.2 12.4 12.7 12.9 13.1 13.2 13.4 13.5 13.6 13.8 13.9 14.0 14.1 14.2 14.2	
15.0	10.3 11.0 11.5 11.9 12.3 12.6 12.9 13.1 13.3 13.5 13.7 13.8 14.0 14.1 14.2 14.3 14.4 14.5 14.6 14.7	14.8
15.5 16.0	10.7 11.3 11.9 12.3 12.7 13.0 13.3 13.5 13.7 13.9 14.1 14.3 14.4 14.6 14.7 14.8 14.9 15.0 15.1 15.2 11.0 11.7 12.2 12.7 13.1 13.4 13.7 14.0 14.2 14.4 14.6 14.7 14.9 15.0 15.2 15.3 15.4 15.5 15.6 15.7	15.3
16.5	11.3 12.0 12.6 13.1 13.5 13.8 14.1 14.4 14.6 14.8 15.0 15.2 15.3 15.5 15.6 15.8 15.9 16.0 16.1 16.2	16.3
17.0 17.5	11.7 12.4 13.0 13.5 13.9 14.2 14.5 14.8 15.0 15.3 15.5 15.6 15.8 16.0 16.2 16.4 16.5 16.6 16.7 12.0 12.7 13.3 13.8 14.3 14.6 14.9 15.2 15.5 15.7 15.9 16.1 16.3 16.4 16.6 16.7 16.8 17.0 17.1 17.2	16.8
18.0	12.3 13.1 13.7 14.2 14.7 15.0 15.4 15.6 15.9 16.1 16.3 16.5 16.7 16.9 17.0 \$7.2 17.3 17.4 17.5 17.7	17.8
18.5 19.0	12.6 13.4 14.1 14.6 15.1 15.4 15.8 16.1 16.3 16.6 16.8 17.0 17.2 17.3 17.5 17.6 17.8 17.9 18.0 18.1 13.0 13.8 14.4 15.0 15.4 15.8 16.2 16.5 16.8 17.0 17.2 17.4 17.6 17.8 18.0 18.1 18.3 18.4 18.5 18.6	
19.5	13.3 14.1 14.8 15.4 15.8 16.2 16.6 16.9 17.2 17.5 17.7 17.9 18.1 18.3 18.4 18.6 18.7 18.9 19.0 19.1	19.2
20.0 20.5	13.6 14.5 15.2 15.7 16.2 16.6 17.0 17.3 17.6 17.9 18.1 18.3 18.5 18.7 18.9 19.1 19.2 19.4 19.5 19.6 13.9 14.8 15.5 16.1 16.6 17.0 17.4 17.8 18.1 18.3 18.6 18.8 19.0 19.2 19.4 19.5 19.7 19.8 20.0 20.1	
21.0 21.5	14.3 15.2 15.9 16.5 17.0 17.4 17.8 18.2 18.5 18.8 19.0 19.2 19.5 19.6 19.8 20.0 20.2 20.3 20.4 20.6 14.6 15.5 16.3 16.9 17.4 17.8 18.2 18.6 18.9 19.2 19.5 19.7 19.9 20.1 20.3 20.5 20.6 20.8 20.9 21.1	20.7
22.0	14.9 15.8 16.6 17.2 17.8 18.2 18.7 19.0 19.3 19.6 19.9 20.1 20.4 20.6 20.8 20.9 21.1 21.3 21.4 21.6	21.7
22.5 23.0	15.2 16.2 17.0 17.6 18.2 18.6 19.1 19.4 19.8 20.1 20.3 20.6 20.8 21.0 21.2 21.4 21.6 21.7 21.9 22.0 15.5 16.5 17.3 18.0 18.6 19.0 19.5 19.9 20.2 20.5 20.8 21.0 21.3 21.5 21.7 21.9 22.1 22.2 22.4 22.5	22.2
23.5	15.8 16.9 17.7 18.4 18.9 19.4 19.9 20.3 20.6 20.9 21.2 21.5 21.7 21.9 22.1 22.3 22.5 22.7 22.9 23.0	23.2
24.0 24.5	16.2 17.2 18.0 18.7 19.3 19.8 20.3 20.7 21.0 21.4 21.7 21.9 22.2 22.4 22.6 22.8 23.0 23.2 23.3 23.5 16.5 17.5 18.4 19.1 19.7 20.2 20.7 21.1 21.5 21.8 22.1 22.4 22.6 22.9 23.1 23.3 23.5 23.7 23.8 24.0	
25.0	16.8 17.9 18.8 19.5 20.1 20.6 21.1 21.5 21.9 22.2 22.5 22.8 23.1 23.3 23.5 23.7 23.9 24.1 24.3 24.5	24.6
25.5 26.0	17.1 18.2 19.1 19.8 20.5 21.0 21.5 21.9 22.3 22.7 23.0 23.3 23.5 23.8 24.0 24.2 24.4 24.6 24.8 25.0 17.4 18.5 19.5 20.2 20.9 21.4 21.9 22.3 22.7 23.1 23.4 23.7 24.0 24.2 24.5 24.7 24.9 25.1 25.3 25.4	
26.5 27.0	17.7 18.9 19.8 20.6 21.2 21.8 22.3 22.8 23.2 23.5 23.8 24.1 24.4 24.7 24.9 25.1 25.4 25.6 25.8 25.9	26.1
27.5	18.0 19.2 20.2 21.0 21.6 22.2 22.7 23.2 23.6 23.9 24.3 24.6 24.9 25.1 25.4 25.6 25.8 26.0 26.2 26.4 18.3 19.5 20.5 21.3 22.0 22.6 23.1 23.6 24.0 24.4 24.7 25.0 25.3 25.6 25.8 26.1 26.3 26.5 26.7 26.9	
28.0 28.5	18.6 19.9 20.9 21.7 22.4 23.0 23.5 24.0 24.4 24.8 25.1 25.5 25.8 26.0 26.3 26.5 26.8 27.0 27.2 27.4 19.0 20.2 21.2 22.0 22.8 23.4 23.9 24.4 24.8 25.2 25.6 25.9 26.2 26.5 26.8 27.0 27.2 27.5 27.7 27.9	27.6
29.0	19.3 20.5 21.6 22.4 23.1 23.8 24.3 24.8 25.2 25.6 26.0 26.4 26.7 27.0 27.2 27.5 27.7 27.9 28.2 28.4	28.6
29.5 30.0	19.6 20.9 21.9 22.8 23.5 24.2 24.7 25.2 25.7 26.1 26.4 26.8 27.1 27.4 27.7 27.9 28.2 28.4 28.6 28.8 19.9 21.2 22.3 23.1 23.9 24.5 25.1 25.6 26.1 26.5 26.9 27.2 27.6 27.9 28.1 28.4 28.7 28.9 29.1 29.3	
30.5	20.2 21.5 22.6 23.5 24.3 24.9 25.5 26.0 26.5 26.9 27.3 27.7 28.0 28.3 28.6 28.9 29.1 29.4 29.6 29.8	30.0
31.0 31.5	20.5 21.8 22.9 23.9 24.6 25.3 25.9 26.4 26.9 27.3 27.7 28.1 28.4 28.8 29.1 29.3 29.6 29.8 30.1 30.3 20.8 22.2 23.3 24.2 25.0 25.7 26.3 26.8 27.3 27.8 28.2 28.5 28.9 29.2 29.5 29.8 30.1 30.3 30.6 30.8	
32.0	21.1 22.5 23.6 24.6 25.4 26.1 26.7 27.3 27.7 28.2 28.6 29.0 29.3 29.7 30.0 30.3 30.5 30.8 31.0 31.3	31.5
32.5 33.0	21.4 22.8 24.0 24.9 25.8 26.5 27.1 27.7 28.2 28.6 29.0 29.4 29.8 30.1 30.4 30.7 31.0 31.3 31.5 31.7 21.7 23.1 24.3 25.3 26.1 26.9 27.5 28.1 28.6 29.0 29.5 29.9 30.2 30.6 30.9 31.2 31.5 31.7 32.0 32.2	32.5
33.5 34.0	22.0 23.5 24.7 25.6 26.5 27.2 27.9 28.5 29.0 29.5 29.9 30.3 30.7 31.0 31.3 31.6 31.9 32.2 32.5 32.7 22.3 23.8 25.0 26.0 26.9 27.6 28.3 28.9 29.4 29.9 30.3 30.7 31.1 31.5 31.8 32.1 32.4 32.7 32.9 33.2	
34.5	22.6 24.1 25.3 26.4 27.2 28.0 28.7 29.3 29.8 30.3 30.8 31.2 31.6 31.9 32.3 32.6 32.9 33.2 33.4 33.7	33.9
35.0 35.5	22.9 24.4 25.7 26.7 27.6 28.4 29.1 29.7 30.2 30.7 31.2 31.6 32.0 32.4 32.7 33.0 33.3 33.6 33.9 34.2 23.2 24.7 26.0 27.1 28.0 28.8 29.5 30.1 30.6 31.1 31.6 32.0 32.4 32.8 33.2 33.5 33.8 34.1 34.4 34.6	
36.0	23.4 25.0 26.3 27.4 28.3 29.1 29.8 30.5 31.0 31.6 32.0 32.5 32.9 33.3 33.6 34.0 34.3 34.6 34.9 35.1	35.4
36.5 37.0	23.7 25.4 26.7 27.8 28.7 29.5 30.2 30.9 31.5 32.0 32.5 32.9 33.3 33.7 34.1 34.4 34.7 35.0 35.3 35.6 24.0 25.7 27.0 28.1 29.1 29.9 30.6 31.3 31.9 32.4 32.9 33.3 33.8 34.2 34.5 34.9 35.2 35.5 35.8 36.1	
37.5 38.0	24.3 26.0 27.3 28.5 29.4 30.3 31.0 31.7 32.3 32.8 33.3 33.8 34.2 34.6 35.0 35.3 35.7 36.0 36.3 36.6	36,9
38.5	24.6 26.3 27.7 28.8 29.8 30.6 31.4 32.1 32.7 33.2 33.7 34.2 34.6 35.1 35.4 35.8 36.1 36.5 36.8 37.1 24.9 26.6 28.0 29.2 30.2 31.0 31.8 32.5 33.1 33.6 34.2 34.6 35.1 35.5 35.9 36.3 36.6 36.9 37.2 37.5	37.8
39.0 39.5	25.2 26.9 28.3 29.5 30.5 31.4 32.2 32.9 33.5 34.1 34.6 35.1 35.5 35.9 36.3 36.7 37.1 37.4 37.7 38.0 25.5 27.2 28.7 29.9 30.9 31.8 32.6 33.3 33.9 34.5 35.0 35.5 36.0 36.4 36.8 37.2 37.5 37.9 38.2 38.5	38.3
40.0	25.8 27.5 29.0 30.2 31.2 32.1 32.9 33.7 34.3 34.9 35.4 35.9 36.4 36.8 37.2 37.6 38.0 38.3 38.7 39.0	39.3
40.5 41.0	26.0 27.9 29.3 30.6 31.6 32.5 33.3 34.1 34.7 35.3 35.9 36.4 36.8 37.3 37.7 38.1 38.5 38.8 39.1 39.5 26.3 28.2 29.7 30.9 32.0 32.9 33.7 34.4 35.1 35.7 36.3 36.8 37.3 37.7 38.1 38.5 38.9 39.3 39.6 40.0	
41.5	26.6 28.5 30.0 31.2 32.3 33.3 34.1 34.8 35.5 36.1 36.7 37.2 37.7 38.2 38.6 39.0 39.4 39.8 40.1 40.4	40.8
42.0 42.5	26.9 28.8 30.3 31.6 32.7 33.6 34.5 35.2 35.9 36.5 37.1 37.7 38.1 38.6 39.0 39.5 39.8 40.2 40.6 40.9 27.2 29.1 30.6 31.9 33.0 34.0 34.9 35.6 36.3 37.0 37.5 38.1 38.6 39.1 39.5 39.9 40.3 40.7 41.0 41.4	
43.0	27.4 29.4 31.0 32.3 33.4 34.4 35.2 36.0 36.7 37.4 38.0 38.5 39.0 39.5 39.9 40.4 40.8 41.2 41.5 41.9	42.2
43.5 44.0	27.7 29.7 31.3 32.6 33.7 34.7 35.6 36.4 37.1 37.8 38.4 38.9 39.5 39.9 40.4 40.8 41.2 41.6 42.0 42.4 28.0 30.0 31.6 33.0 34.1 35.1 36.0 36.8 37.5 38.2 38.8 39.4 39.9 40.4 40.8 41.3 41.7 42.1 42.5 42.8	
44.5	28.3 30.3 31.9 33.3 34.5 35.5 36.4 37.2 37.9 38.6 39.2 39.8 40.3 40.8 41.3 41.7 42.2 42.6 42.9 43.3	43.7
45.0 45.5	28.6 30.6 32.2 33.6 34.8 35.8 36.8 37.6 38.3 39.0 39.6 40.2 40.8 41.3 41.7 42.2 42.6 43.0 43.4 43.8 28.8 30.9 32.6 34.0 35.2 36.2 37.1 38.0 38.7 39.4 40.0 40.6 41.2 41.7 42.2 42.6 43.1 43.5 43.9 44.3	44.6
46.0 46.5	29.1 31.2 32.9 34.3 35.5 36.6 37.5 38.4 39.1 39.8 40.5 41.1 41.6 42.1 42.6 43.1 43.5 44.0 44.4 44.8	45.1
47.0	29.4 31.5 33.2 34.6 35.9 36.9 37.9 38.7 39.5 40.2 40.9 41.5 42.1 42.6 43.1 43.6 44.0 44.4 44.8 45.2 29.7 31.8 33.5 35.0 36.2 37.3 38.3 39.1 39.9 40.6 41.3 41.9 42.5 43.0 43.5 44.0 44.5 44.9 45.3 45.7	46.1
47.5 48.0	29.9 32.1 33.8 35.3 36.6 37.7 38.6 39.5 40.3 41.0 41.7 42.3 42.9 43.5 44.0 44.5 44.9 45.4 45.8 46.2 30.2 32.4 34.2 35.6 36.9 38.0 39.0 39.9 40.7 41.4 42.1 42.8 43.3 43.9 44.4 44.9 45.4 45.8 46.3 46.7	46.6
48.5	30.5 32.7 34.5 36.0 37.3 38.4 39.4 40.3 41.1 41.9 42.5 43.2 43.8 44.3 44.9 45.4 45.8 46.3 46.7 47.2	47.6
49.0 49.5	30.7 33.0 34.8 36.3 37.6 38.8 39.8 40.7 41.5 42.3 43.0 43.6 44.2 44.8 45.3 45.8 46.3 46.8 47.2 47.6 31.0 33.3 35.1 36.6 38.0 39.1 40.1 41.1 41.9 42.7 43.4 44.0 44.6 45.2 45.8 46.3 46.8 47.2 47.7 48.1	48.0 48 5
50.0	31.3 33.6 35.4 37.0 38.3 39.5 40.5 41.4 42.3 43.1 43.8 44.4 45.1 45.7 46.2 46.7 47.2 47.7 48.2 48.6	49.0

STUMP DOB	0.0	0.2	0.4	0.6	0.8					EIGHT	(IN 2.0				2.8	3.0	3.2	3.4	3.6	3.8	4.0
5.0 5.5	3.1 3.4	3.3 3.7	3.5 3.9	3.7 4.1	3.9 4.2	4.0 4.4	4.1 4.5	4.2	4.3	4.3	4.4	4.5	4.5 5.0	4.6 5.1	4.7 5.1	4.7 5.2	4.8 5.2	4.8 5.3	4.8 5.3	4.9 5.4	4.9 5.4
6.0	3.7	4.4	4.3	4.5	4.6	4.8 5.2	4.9 5.3	5.0 5.4	5.1 5.5	5.2 5.6	5.3	5.4 5.8	5.5 5.9	5.5	5.6	5.6 6.1	5.7	5.8	5.8	5.9	5.9
7.0	4.4	4.7	5.0	5.2	5.4	5.6	5.7	5.9	6.0	6.1	6.2	6.3	6.4	6.4	6.5	6.6	6.7	6.7	6.8	6.8	6.9
7.5 8.0	4.7 5.0	5.4	5.3 5.7	5.6 5.9	5.8	6.0	6.1	6.3	6.4	7.0	6.6 7.1	7.2	7.3	7.4	7.0	7.1 7.5	7.1 7.6	7.2	7.3	7.3	7.4
8.5 9.0	5.3 5.6	5.7	6.0	6.3	6.5	6.8 7.2	6.9 7.3	7•1 7•5	7.3 7.7	7.4 7.8	7.5 8.0	7.6 8.1	7.7 8.2	7.8 8.3	7.9 8.4	8.0 8.5	8.1 8.6	8.2 8.6	8.2 8.7	8.3	8.4 8.8
9.5 10.0	5.9 6.2	6.4	6.7 7.1	7.0 7.4	7.3 7.7	7.5 7.9	7.8 8.2	7.9 8.4	8.1	8.3 8.7	8.4 8.8	8.5 9.0	8.6 9.1	8.7 9.2	8.8 9.3	8.9 9.4	9.0 9.5	9.1	9.2 9.7	9.3 9.8	9.3 9.8
10.5	6.5	7.0 7.4	7.4 7.8	7.8	8.1	8.3	8.6 9.0	8 · 8 9 · 2	9.0	9.1 9.6	9.3	9.4	9.5	9.7	9.8 10.2		10.0	10.1			10.3
11.5	7.2	7.7	8.2	8.5	8.9	9.1	9.4	9.6	9.8	10.0	10.2	10.3	10.5	10.6	10.7	10.8	10.9	11.0	11.1	11.2	11.3
12.5	7.8	8.4	8.9	9.3	9.6	9.9	10.2	10.4	10.7	10.9	11.0	11.2	11.4	11,5	11.6	11.8	11.9	12.0	12.1	12.2	12.3
13.0 13.5	8.1	8.7 9.0		10.0	10.4	10.7	11.0	11.3	11.5	11.7	11.9	12.1	12.3	12.4	12.6	12.7	12.8	13.0	13.1	13.2	13.3
14.0 14.5	8.7 9.0		10.3	10.8	11.2	11.5	11.8	12.1	12.4		12.8	13.0	13.2	13.4	13.5	13.6	13.8	13.9	14.0	14.1	14.3
15.0 15.5			10.6																		
16.0 16.5			11.3																		
17.0 17.5	10.6	11.4	12.1	12.6	13.1	13.5	13.9	14.2	14.5	14.8	15.0	15.2	15.5	15.7	15.8	16.0	16.2	16.3	16.5	16.6	16.7
18.0	11.2	12.1	12.8	13.4	13.9	14.3	14.7	15.0	15.4	15.6	15.9	16.1	16.4	16.6	16.8	16.9	17.1	17,3	17.4	17.6	17.7
18.5 19.0	11.8	12.7	13.1 13.5	14.1	14.6	15.1	15.5	15.9	16.2	16.5	16.8	17.0	17.3	17.5	17.7	17.9	18.1	18.2	18.4	18.5	18.7
19.5 20.0			13.8 14.2																		
20.5 21.0			14.5																		
21.5			15.2 15.6																		
22.5	14.0	15.1	16.0 16.3	16.7	17.3	17.9	18.4	18.8	19.2	19.6	19.9	20.2	20.5	20.7	21.0	21.2	21.4	21.6	21.8	22.0	22.1
23.5	14.6	15.7	16.7 17.0	17.4	18.1	18.7	19.2	19.6	20.1	20.4	20.8	21.1	21.4	21.6	21.9	22.1	22.3	22.5	22.7	22.9	23.1
24.5	15.2	16.4	17.4	18.2	18.9	19.5	20.0	20.5	20.9	21.3	21.7	22.0	22.3	22.6	22.8	23.1	23.3	23.5	23.7	23.9	24.1
25.0 25.5	15.9	17.1	17.7	18.9	19.6	20.3	20.8	21.3	21.8	22.2	22.5	22.9	23.2	23.5	23.8	24.0	24.2	24.5	24.7	24.9	25.1
26.0 26.5	16.5	17.8	18.4 18.8	19.7	20.4	21.1	21.6	22.2	22.6	23.0	23.4	23.8	24.1	24.4	24.7	24.9	25.2	25.4	25.6	25.9	26.1
27.0 27.5			19.2 19.5																		
28.0 28.5	17.4	18.8	19.9	20.8	21.6	22.3	22.9	23.4	23.9	24.3	24.7	25.1	25.5	25.8	26.1	26.4	26.6	26.9	27.1	27.3	27.5
29.0 29.5	18.0	19.4	20.6	21.5	22.3	23.1	23.7	24.2	24.7	25.2	25.6	26.0	26.4	26.7	27.0	27.3	27.6	27.8	28.1	28.3	28.5
30.0 30.5	18.7	20.1	21.3	22.3	23.1	23.8	24.5	25.1	25.6	26.1	26.5	26.9	27.3	27.6	27.9	28.2	28.5	28.8	29.0	29.3	29.5
31.0	19.3	20.8	22.0	23.0	23.9	24.6	25.3	25.9	26.5	26.9	27.4	27.8	28.2	28.5	28.9	29.2	29.5	29.7	30.0	30.2	30.5
31.5 32.0	19.9	21.4	22.7	23.8	24.7	25.4	26.1	26.8	27.3		28.3	28.7	29.1	29.5	29.8	30.1	30.4	30.7	31.0	31.2	31.5
32.5 33.0	20.5		23.4	24.5	25.4	26.2	26.9	27.6	28.2		29.2	29.6	30.0	30.4	30.7	31.1	31.4	31.7	31.9	32.2	32.4
33.5 34.0	21.2	22.8	23.8	25.2	26.2	27.0	27.8	28.4	29.0	29.6	30.0	30.5	30.9	31.3	31.7	32.0	32.3	32.6	32.9	33.2	33.4
34.5 35.0			24.5 24.8																		
35.5 36.0	22.1	23.8	25.2 25.5	26.3	27.3	28.2	29.0	29.7	30.3	30.9	31.4	31.8	32.3	32.7	33.1	33.4	33.8	34.1	34.4	34.6	34.9
36.5 37.0	22.7	24.5	25.9	27.1	28.1	29.0	29.8	30.5	31.2	31.7	32.3	32.7	33.2	33.6	34.0	34.4	34.7	35.0	35.3	35.6	35.9
37.5	23.3	25.1	26.6	27.8	28.9	29.8	30.6	31.4	32.0	32.6	33.1	33.6	34.1	34.5	34.9	35.3	35.7	36.0	36.3	36.6	36.9
38.5	24.0	25.8	27.3	28.6	29.7	30.6	31.4	32.2	32.9	33.5	34.0	34.5	35.0	35.5	35.9	36.2	36.6	36.9	37.3	37.6	37.8
39.0 39.5	24.6	26.5	27.7 28.0	29.3	30.4	31.4	32.3	33.0	33.7	34.3	34.9	35.4	35.9	36.4	36.8	37.2	37.6	37.9	38.2	38.5	38.8
40 • 0 40 • 5	25.2	27.2	28.4 28.7	30.1	31.2	32.2	33.1	33.9	34.6	35.2	35.8	36.3	36.8	37.3	37.7	38.1	38.5	38.9	39.2	39.5	39.8
41.0 41.5	25.5 25.8	27.5 27.8	29.1 29.4	30.4 30.8	31.6	32.6	33.5 33.9	34·3 34·7	35.0 35.4	35.6 36.1	36.2 36.7	36.8 37.2	37.3 37.7	37.8 38.2	38.2 38.7	38.6 39.1	39.0 39.5	39.3 39.8	39.7 40.2	40 · 0 40 · 5	40.3 40.8
42.0 42.5	26.1	28.2	29.8	31.2	32.4	33.4	34.3	35.1	35.8	36.5	37.1	37.7	38.2	38.7	39.1	39.5	39.9	40.3	40.6	41.0	41.3
43.0 43.5	26.8	28.8	30.5	31.9	33.1	34.2	35.1	36.0	36.7	37.4	38.0	38.6	39.1	39.6	40.1	40.5	40.9	41.3	41.6	42.0	42.3
44.0 44.5	27.4	29.5	31.2	32.7	33.9	35.0	35.9	36.8	37.6	38.3	38.9	39.5	40.0	40.5	41.0	41.4	41.8	42.2	42.6	42.9	43.3
45.0	28.0	30.2	31.9	33.4	34.7	35,8	36.8	37.6	38.4	39.1	39.8	40.4	40.9	41.4	41.9	42.4	42.8	43.2	43.6	43.9	44.2
45.5	28.6	30.8	32.3 32.6	34.1	35.4	36.6	37.6	38.5	39.3	40.0	40.7	41.3	41.8	42.4	42.9	43.3	43.7	44.1	44.5	44.9	45.2
46.5 47.0	29.3	31.5	33.0	34.9	36.2	37.4	38.4	39.3	40.1	40.9	41.5	42.2	42.7	43.3	43.8	44.2	44.7	45.1	45.5	45.9	46.2
47.5 48.0	29.9	32.2	33.7 34.1	35.6	37.0	38.2	39.2	40.1	41.0	41.7	42.4	43.1	43.7	44.2	44.7	45.2	45.6	46.1	46.5	46.8	47.2
48.5 49.0	30.2	32.5	34.4 34.8	36.0	37.4	38.6	39.6	40.6	41.4	42.2	42.9	43.5	44.1	44.7	45.2	45.7	46.1	46.5	46.9	47.3	47.7
49.5 50.0	30.8	33.2	35.1 35.5	36.7	38.1	39.4	40.4	41.4	42.3	43.0	43.8	44.4	45.0	45.6	46.1	46.6	47.1	47.5	47.9	48.3	48.7
	•				- /-									- •		•					

STUMP		STUMP HEIGHT (IN FEET)	
DOB			2.6 2.8 3.0 3.2 3.4 3.6 3.8 4.0
5.0 5.5 6.0	3.3 3.5 3.7 3.9 4.1 4.2	.9 4.1 4.1 4.2 4.3 4.4 4.5 .3 4.5 4.6 4.7 4.7 4.8 4.9 .7 4.9 5.0 5.1 5.2 5.3 5.4	4.5 4.6 4.6 4.7 4.8 4.8 4.8 4.9 5.0 5.0 5.1 5.2 5.2 5.3 5.3 5.4 5.4 5.5 5.6 5.6 5.7 5.8 5.8 5.9
6.5 7.0	3.9 4.2 4.4 4.6 4.8 5.0	.1 5.3 5.4 5.5 5.6 5.7 5.8 .5 5.7 5.8 5.9 6.0 6.1 6.2	5.9 6.0 6.0 6.1 6.2 6.2 6.3 6.4 6.3 6.4 6.5 6.6 6.7 6.7 6.8 6.9
7.5 8.0	4.5 4.8 5.1 5.3 5.6 5.8	.9 6.1 6.2 6.4 6.5 6.6 6.7 .3 6.5 6.6 6.8 6.9 7.0 7.1	6.8 6.9 7.0 7.1 7.1 7.2 7.3 7.3 7.2 7.3 7.4 7.5 7.6 7.7 7.8 7.8
8.5 9.0	5.1 5.5 5.8 6.1 6.3 6.5	.7 6.9 7.1 7.2 7.3 7.5 7.6 .1 7.3 7.5 7.6 7.8 7.9 8.0	7.7 7.8 7.9 8.0 8.1 8.2 8.2 8.3 8.1 8.3 8.4 8.5 8.6 8.6 8.7 8.8
9.5 10.0	5.7 6.1 6.5 6.8 7.1 7.3	.5 7.7 7.9 8.1 8.2 8.3 8.5 .9 8.1 8.3 8.5 8.6 8.8 8.9	8.6 8.7 8.8 8.9 9.0 9.1 9.2 9.3 9.1 9.2 9.3 9.4 9.5 9.6 9.7 9.8
10.5	6.3 6.8 7.2 7.5 7.8 8.1	.3 8.5 8.7 8.9 9.1 9.2 9.4	9.5 9.6 9.8 9.9 10.0 10.1 10.2 10.3 10.0 10.1 10.2 10.3 10.5 10.6 10.7 10.8
11.5 12.0	6.9 7.4 7.8 8.2 8.5 8.8	.1 9.3 9.6 9.8 9.9 10.1 10.3	10.4 10.6 10.7 10.8 10.9 11.0 11.2 11.3 10.9 11.0 11.2 11.3
12.5 13.0			11.3 11.5 11.6 11.8 11.9 12.0 12.1 12.2 11.8 11.9 12.1 12.2 12.4 12.5 12.6 12.7
13.5 14.0	8.4 9.0 9.6 10.0 10.4 10.8 1	.1 11.4 11.6 11.9 12.1 12.3 12.5	12.2 12.4 12.6 12.7 12.8 13.0 13.1 13.2 12.7 12.9 13.0 13.2 13.3 13.5 13.6 13.7
14.5 15.0	9.0 9.7 10.2 10.7 11.2 11.5 1	.9 12.2 12.5 12.7 13.0 13.2 13.4	13.1 13.3 13.5 13.6 13.8 13.9 14.1 14.2 13.6 13.8 14.0 14.1 14.3 14.4 14.6 14.7
15.5 16.0	9.6 10.3 10.9 11.5 11.9 12.3 1	.7 13.0 13.3 13.6 13.8 14.1 14.3	14.1 14.2 14.4 14.6 14.7 14.9 15.0 15.2 14.5 14.7 14.9 15.1 15.2 15.4 15.5 15.7
16.5 17.0	10.2 11.0 11.6 12.2 12.7 13.1 1	.5 13.8 14.1 14.4 14.7 15.0 15.2	15.0 15.2 15.4 15.5 15.7 15.9 16.0 16.2 15.4 15.6 15.8 16.0 16.2 16.3 16.5 16.7
17.5 18.0	10.8 11.6 12.3 12.9 13.4 13.9 1	.3 14.7 15.0 15.3 15.6 15.8 16.1	15.9 16.1 16.3 16.5 16.7 16.8 17.0 17.1 16.3 16.5 16.8 16.9 17.1 17.3 17.5 17.6
18.5 19.0 19.5	11.4 12.3 13.0 13.6 14.2 14.7 1	.1 15.5 15.8 16.2 16.5 16.7 17.0	16.8 17.0 17.2 17.4 17.6 17.8 18.0 18.1 17.2 17.5 17.7 17.9 18.1 18.3 18.4 18.6 17.7 17.9 18.2 18.4 18.6 18.7 18.9 19.1
20.0	12.0 12.9 13.7 14.4 14.9 15.4 1	.9 16.3 16.7 17.0 17.3 17.6 17.9	18.1 18.4 18.6 18.8 19.0 19.2 19.4 19.6 18.6 18.9 19.1 19.3 19.5 19.7 19.9 20.1
21.0	12.6 13.6 14.4 15.1 15.7 16.2 1	.7 17.1 17.5 17.9 18.2 18.5 18.8	19.1 19.3 19.6 19.8 20.0 20.2 20.4 20.6 19.5 19.8 20.0 20.2 20.7 20.9 21.1
22.0	13.2 14.2 15.1 15.8 16.4 17.0 1	.5 17.9 18.3 18.7 19.1 19.4 19.7	20.0 20.2 20.5 20.7 20.9 21.2 21.4 21.6 20.4 20.7 21.0 21.2 21.4 21.6 20.8 22.0
23.0 23.5	13.9 14.9 15.8 16.5 17.2 17.8 1	.3 18.8 19.2 19.6 19.9 20.3 20.6	20.9 21.2 21.4 21.7 21.9 22.1 22.3 22.5 21.3 21.6 21.9 22.1 22.4 22.6 22.8 23.0
24.0 24.5			21.8 22.1 22.4 22.6 22.9 23.1 23.3 23.5 22.2 22.5 22.8 23.1 23.3 23.6 23.8 24.0
25.0 25.5	15.4 16.5 17.5 18.4 19.1 19.7 2	.3 20.8 21.3 21.7 22.1 22.5 22.8	22.7 23.0 23.3 23.6 23.8 24.0 24.3 24.5 23.2 23.5 23.8 24.0 24.3 24.5 24.8 25.0
26.0 26.5	16.0 17.2 18.2 19.1 19.8 20.5 2	.1 21.6 22.1 22.6 23.0 23.4 23.7	23.6 23.9 24.2 24.5 24.8 25.0 25.3 25.5 24.1 24.4 24.7 25.0 25.2 25.5 25.7 26.0
27.0 27.5 28.0	16.6 17.9 18.9 19.8 20.6 21.3 2	.9 22.5 23.0 23.4 23.9 24.3 24.6	24,5 24.9 25.2 25.4 25.7 26.0 26.2 26.5 25.0 25.3 25.6 25.9 26.2 26.5 26.7 26.9
28.5	17.2 18.5 19.6 20.5 21.3 22.1 2	.7 23.3 23.8 24.3 24.7 25.2 25.5	25.4 25.8 26.1 26.4 26.7 26.9 27.2 27.4 25.9 26.2 26.6 26.9 27.2 27.4 27.7 27.9 26.4 26.7 27.0 27.3 27.6 27.9 28.2 28.4
29.5 30.0	17.8 19.2 20.3 21.3 22.1 22.8 2	.5 24.1 24.7 25.2 25.6 26.0 26.4	26.8 27.2 27.5 27.8 28.1 28.4 28.7 28.9 27.3 27.6 28.0 28.3 28.6 28.9 29.1 29.4
30.5 31.0	18.5 19.9 21.0 22.0 22.9 23.6 2	.3 24.9 25.5 26.0 26.5 26.9 27.3	27.7 28.1 28.4 28.8 29.1 29.4 29.6 29.9 28.2 28.6 28.9 29.2 29.5 29.8 30.1 30.4
31.5 32.0			28.6 29.0 29.4 29.7 30.0 30.3 30.6 30.9 29.1 29.5 29.8 30.2 30.5 30.8 31.1 31.4
32.5 33.0	20.0 21.5 22.8 23.8 24.8 25.6 2	.3 27.0 27.6 28.2 28.7 29.2 29.6	29.6 29.9 30.3 30.7 31.0 31.3 31.6 31.9 30.0 30.4 30.8 31.1 31.5 31.8 32.1 32.3
33.5 34.0	20.6 22.2 23.5 24.6 25.5 26.4 2	.1 27.8 28.5 29.0 29.6 30.0 30.5	30.5 30.9 31.2 31.6 31.9 32.2 32.5 32.8 30.9 31.3 31.7 32.1 32.4 32.7 33.0 33.3
34.5 35.0 35.5	21.2 22.8 24.2 25.3 26.3 27.2 2	.9 28.7 29.3 29.9 30.4 30.9 31.4	31.4 31.8 32.2 32.5 32.9 33.2 33.5 33.8 31.8 32.3 32.7 33.0 33.4 33.7 34.0 34.3
36.0 36.5	21.9 23.5 24.9 26.0 27.1 28.0 2	.8 29.5 30.1 30.7 31.3 31.8 32.3	32.3 32.7 33.1 33.5 33.8 34.2 34.5 34.8 32.8 33.2 33.6 34.0 34.3 34.7 35.0 35.3 33.2 33.7 34.1 34.4 34.8 35.1 35.5 35.8
37.0 37.5	22.5 24.2 25.6 26.8 27.8 28.7 2	.6 30.3 31.0 31.6 32.2 32.7 33.2	33.7 34.1 34.5 34.9 35.3 35.6 36.0 36.3 34.1 34.6 35.0 35.4 35.8 36.1 36.4 36.8
38.0 38.5	23.1 24.8 26.3 27.5 28.6 29.5 3	.4 31.1 31.8 32.5 33.1 33.6 34.1	34.6 35.0 35.5 35.9 36.2 36.6 36.9 37.3 35.1 35.5 35.9 36.3 36.7 37.1 37.4 37.7
39.0 39.5			35.5 36.0 36.4 36.8 37.2 37.6 37.9 38.2 36.0 36.4 36.9 37.3 37.7 38.0 38.4 38.7
40.0 40.5	24.7 26.5 28.1 29.4 30.5 31.5 3	.4 33.2 34.0 34.6 35.3 35.8 36.4	36.4 36.9 37.3 37.8 38.2 38.5 38.9 39.2 36.9 37.4 37.8 38.2 38.6 39.0 39.4 39.7
41.0 41.5	25.3 27.2 28.8 30.1 31.3 32.3 3	.2 34.1 34.8 35.5 36.1 36.7 37.3	37.4 37.8 38.3 38.7 39.1 39.5 39.9 40.2 37.8 38.3 38.8 39.2 39.6 40.0 40.3 40.7
42.0 42.5	25.9 27.9 29.5 30.8 32.0 33.1 3	.0 34.9 35.7 36.4 37.0 37.6 38.2	38.3 38.8 39.2 39.7 40.1 40.5 40.8 41.2 38.7 39.2 39.7 40.1 40.5 40.9 41.3 41.7
43.5 43.5	26.6 28.5 30.2 31.6 32.8 33.9 3	.8 35.7 36.5 37.2 37.9 38.5 39.1	39.2 39.7 40.2 40.6 41.0 41.4 41.8 42.2 39.6 40.2 40.6 41.1 41.5 41.9 42.3 42.7
44.0 44.5 45.0	27.2 29.2 30.9 32.3 33.6 34.7 3	.7 36.5 37.4 38.1 38.8 39.4 40.0	40.1 40.6 41.1 41.6 42.0 42.4 42.8 43.2 40.6 41.1 41.6 42.0 42.5 42.9 43.3 43.6 41.0 41.5 42.0 42.5 42.9 43.4 43.8 44.1
45.5 46.0	27.8 29.9 31.6 33.1 34.3 35,5 3	.5 37.4 38.2 39.0 39.7 40.3 40.9	41.5 42.0 42.5 43.0 43.4 43.8 44.2 44.6 41.5 42.5 43.0 43.5 43.9 44.3 44.7 45.1
46.5	28.4 30.6 32.3 33.8 35.1 36.3 3	.3 38.2 39.1 39.8 40.6 41.2 41.8	42.4 42.9 43.5 43.9 44.4 44.8 45.2 45.6 42.9 43.4 43.9 44.4 44.9 45.3 45.7 46.1
47.5 48.0	29.1 31.2 33.0 34.6 35.9 37.1 3	.1 39.1 39.9 40.7 41.4 42.1 42.7	43.3 43.9 44.4 44.9 45.3 45.8 46.2 46.6 43.8 44.3 44.9 45.4 45.8 46.3 46.7 47.1
48.5 49.0	29.7 31.9 33.7 35.3 36.7 37.9 3 30.0 32.2 34.1 35.7 37.0 38.2 3	.9 39.9 40.8 41.6 42.3 43.0 43.6 .3 40.3 41.2 42.0 42.8 43.5 44.1	44.2 44.8 45.3 45.8 46.3 46.7 47.2 47.6 44.7 45.3 45.8 46.3 46.8 47.2 47.7 48.1
49.5 50.0	30.3 32.6 34.5 36.0 37.4 38.6 3 30.7 32.9 34.8 36.4 37.8 39.0 4	.7 40.7 41.6 42.4 43.2 43.9 44.6 .1 41.1 42.0 42.9 43.6 44.4 45.0	45.2 45.7 46.3 46.8 47.3 47.7 48.1 48.6 45.6 46.2 46.7 47.3 47.7 48.2 48.6 49.0

STUMP DOB	0.0 0.	2 0.4	0.6	0.8	1.0			UMP H 1.6			FEET) 2.2	2.4	2.6	2.8	3.0	3.2	3.4	3.6	3.8	4.0
5.0	3.4 3.		4.0	4.1	4.2	4.3	4.4	4.4	4.5	4.6 5.0	4.6 5.1	4.7	4.7 5.2	4.8 5.2	4.8 5.3	4.8 5.3	4,9 5,3	4.9	4.9 5.4	4.9 5.4
5.5 6.0	3.7 4. 4.1 4.		4.4	4.5 4.9	4.6 5.0	5.1	5.2	5.3	5.4	5.5	5.5	5.6	5.7	5.7	5.7	5.8	5.8	5.9	5.9	5.9
6.5	4.4 4.		5.2	5.3	5.5	5.6	5.7	5.8	5,9	5.9	6.0	6.1	6.1	6.2	6.2	6.3 6.8	6.3 6.8	6.4 6.8	6.4	6.4
7.0 7.5	4.8 5. 5.1 5.		5.5 5.9	5.7 6.1	5.9 6.3	6.0	6.1	6.2	6.8	6.4	6.5	6.5 7.0	7.1	7.1	7.2	7.2	7.3	7.3	7.4	7.4
8.0	5.5 5.	8 6.1	6.3	6.5	6.7	6.9	7.0	7.1	7.2	7.3	7.4	7.5	7,5	7.6	7.7	7.7	7.8	7.8	7.9	7.9
8.5 9.0	5.8 6.		6.7 7.1	6.9 7.4	7.1 7.6	7.3 7.7	7.4 7.9	7.6 8.0	7.7 8.1	7.8 8.2	7.9 8.3	7.9 8.4	8.0 8.5	8.1	8.1 8.6	8.2	8.3 8.7	8.3 8.8	8.4 8.8	8.4
9.5	6.5 6.	9 7.2	7.5	7.8	8.0	8.1	8.3	8.4	8.6	8.7	8,8	8.9	9.0	9.0	9.1	9.2	9.2	9.3	9.3	9.4
10.0 10.5	6.8 7. 7.2 7.		7.9 8.3	8.2 8.6	8.4 8.8	8.6 9.0	8•7 9•2	8.9 9.3	9.0 9.5	9.1 9.6	9.2 9.7	9.3 9.8	9.4	9.5	9.6	9.7	9.7 10.2	9.8	9.8	9.9 10.4
11.0	7.5 8.	0 8.4	8.7	9.0	9.2	9.4	9.6	9.8	9.9	10.0	10.2	10.3	10.4	10.5	10.5	10.6	10.7	10.8	10.8	10.9
11.5	7.8 8. 8.2 8.		9.1 9.5	9.4	9.6	9.9	10.5	10.2	10.4	10.5	10.6	10.7	10.8	10.9	11.5	11.6	11.7	11.2	11.3	11.4
12.0 12.5	8.5 9.	1 9.5	9.9	10.2	10.5	10.7	10.9	11.1	11.3	11.4	11.5	11.7	11.8	11.9	12.0	12.1	12.1	12.2	12.3	12.4
13.0	8.8 9.	4 9.9 8 10.3	10.3	10.6	10.9	11.1	11.4	11.5	11.7	11.9	12.0	12.1	12.2	12.4	12.5	12.5	12.6	12.7	12.8	12.8
13.5 14.0	9.5 10.	2 10.7	11.1	11.4	11.7	12.0	12.2	12.4	12.6	12.8	12.9	13.1	13.2	13.3	13.4	13.5	13.6	13.7	13.8	13.8
14.5	9.9 10.	5 11.0	11.5	11.8	12.2	12.4	12.7	12.9	13.1	13.2	13.4	13.5	13.7	13.8	13.9	14.0	14.1	14.2	14.3	14.3
15.0 15.5	10.2 10.	2 11.8	12.3	12.7	13.0	13.3	13.5	13.8	14.0	14.1	14.3	14.5	14.6	14.7	14.8	15.0	15.1	15.1	15.2	15.3
16.0	10.9 11.	6 12.2	12.7	13.1	13.4	13.7	14.0	14.2	14.4	14.6	14.8	14.9	15.1	15.2	15.3	15,4	15.5	15.0	15.7	15.8
16.5 17.0	11.2 12.	3 12.9	12.5	13.9	14.2	14.6	14.8	15.1	15.3	15.5	15.7	15.9	16.0	16.2	16.3	16.4	16.5	16.6	16.7	16.8
17.5	11.9 12.	7 13.3	13.8	14.3	14.7	15.0	15.3	15.5	15.8	16.0	16.2	16.3	16.5	16.6	16.8	16.9	17.0	17.1	17.2	17.3
18.0 18.5	12.2 13.	1 13.7	14.2	14.7	15.5	15.8	15.7	16.4	16.7	16.9	10:0	17.3	17.0	27.1 27.6	17.7	17.8	18.0	18.1	18.2	18.3
19.0	12.9 13.	8 14.5	15.0	15.5	15.9	16.3	16.6	16.9	17.1	17.3	17.5	17.7	17.9	T0 . 1	18.2	18.3	18.5	18.6	18.7	18.8
19.5	13.3 14.	1 14.8	15.4	15.9	16.3	16.7	17.0	17.3	17.6	17.8	18.0	18.2	18.4	1815	18.7	18.8	18.9	19.5	19.2	19.3
20.0 20.5	13.9 14.	9 15.6	16.2	16.7	17.2	17.6	17.9	18.2	18.5	18.7	18.9	19.1	19.3	19.5	19.6	19.8	19.9	20.0	20 • 1	20.3
21.0	14.3 15.	2 16.0	16.6	17.1	17.6	18.0	18.3	18.6	18.9	19.2	19.4	19.6	19.8	19.9	20.1	20.3	20.4	20.5	20.6	20.8
21.5 22.0	14.9 15.	9 16.7	17.4	17.9	18.4	18.8	19.2	19.5	19.8	20.1	20.3	20.5	20.7	20.9	21.1	21.2	21.4	21.5	21.6	21.7
22.5	15.3 16. 15.6 16.	3 17.1	17.8	18.4	18.8	19.3	19.6	20.0	20.3	20.5	20.8	21.0	21.2	21.4	21.5	21.7	21.8	22.0	22.1	22.2
23.0 23.5	16.0 17.	0 17.9	18.6	19.2	19.7	20.1	20.5	20.8	21.2	21.4	21.7	21.9	22.1	22.3	22.5	22.7	22.8	23.0	23.1	23.2
24.0	16.3 17.	4 18.3	19.0	19.6	20.1	20.5	20.9	21.3	21.6	21.9	22.1	22.4	22.6	22.8	23.0	23.1	23.3	23.4	23.6	23.7
24.5 25.0	16.6 17. 17.0 18.	1 19.0	19.4	20.0	20.9	21.4	21.4	22.2	22.5	22.8	23.1	23.3	23.5	23.7	23.9	24.1	24.3	24.4	24.6	24.7
25.5	17.3 18.	5 19.4	20.2	20.8	21.3	21.8	22.2	22.6	23.0	23.3	23.5	23.8	24.0	24.2	24.4	24.6	24.8	24.9	25.1	25.2
26.0 26.5	17.6 18. 18.0 19.	.8 19.8 .2 20.1	20.5	21.2	22.2	22.3	22.7	23.1	23.4	24.2	24.4	24.7	24.9	25.2	25.4	25.6	25.7	25.9	26.0	26.2
27.0	18.3 19.	.5 20.5	21.3	22.0	22.6	23.1	23.5	23.9	24.3	24.6	24.9	25.2	25.4	25.6	25.8	26.0	26.2	26.4	20.5	26.7
27.5 28.0	18.7 19.	9 20.9	21.7	22.4	23.0	23.5	24.0	24.4	24.7	25.1	25.4	25.6	25.9	26.6	26.3	27.0	27.2	27.4	27.5	27.2
28.5	19.3 20.	6 21.7	22.5	23.2	23.8	24.4	24.9	25.3	25.6	26.0	26.3	26.6	26.8	27.1	27.3	27.5	27.7	27.B	28.0	28.2
29.0 29.5	19.7 21.	0 22.0	22.9	23.6	24.3	24.8	25.3	25.7	26.1	26.4	26.8	27.5	27.3	27.5	27.8	28.0	28.2	28.8	28.5	28.7
30.0	20.3 21.	.7 22.8	23.7	24.4	25.1	25.7	26.2	26.6	27.0	27.3	27.7	28.0	28.2	28.5	28.7	28.9	29.1	29.3	29.5	29.6
30.5	20.7 22	1 23.2	24.1	24.9	25.5	26.1	26.6	27.0	27.4	27.8	28.1	28.4	28.7	29.0	29.2	29.4	29.6	29.8	30.0	30.1
31.0 31.5	21.3 22	.8 23.9	24.9	25.7	26.3	26.9	27.5	27.9	28,3	28.7	29.1	29.4	29,6	29.9	30.1	30.4	30.6	30.8	31.0	31.1
32.0	21.7 23.	.1 24.3	25.3	26.1	26.8	27.4	27.9	28.4	28.8	29.2	29.5	29.8	30.1	30.4	30.6	30.9	31.1	31.3	31.4	31.0
32.5 33.0	22.4 23.	.9 25.1	26.0	26.9	27.6	28.2	28.8	29.2	29.7	30.1	30.4	30.8	31.1	31.3	31.6	31.8	32.0	32.2	32.4	32.6
33.5	22.7 24.	2 25.4	26.4	27.3	28.0	28.6	29.2	29.7	30.1	30.5	30.9	31.2	31.5	31.8	32.1	32.3	32.5	32.7	32.9	33.1
34.0 34.5	23.4 24	.9 26.2	27.2	28.1	28.8	29.5	30.1	30.6	31.0	31.4	31.8	32.1	32.5	32.7	33.0	33.3	33.5	33.7	33.9	34.1
35.0	23.7 25	.3 26.6	27.6	28.5	29.3	29.9	30.5	31.0	31.5	31.9	32.3	32.6	32.9	33.2	33.5	33.7	34.0	34.2	34.4	34.6
35.5 36.0	24.4 26	.0 27.3	28.4	29.3	30.1	30.8	31.4	31.9	32.4	32.8	33.2	33.5	33.9	34.2	34.4	34.7	34.9	35.2	35.4	35.6
36.5	24.7 26 25.0 26	.4 27.7	28.8	29.7	30.5	31.2	31.8	32.3	32.8	33.3	33.6	34.0	34.3	34.6	34.9	35.2	35.4	35.6	35.9	30.1
37.0 37.5	25.4 27	.1 28.5	79.6	30.5	31.3	32.0	32.7	33.2	33.7	34.2	34.6	34.9	35.3	35.6	35.9	36.1	36.4	36.0	30.8	37.0
38.0	25.7 27	.4 28.8	30.0	30.9	31.8	32.5	33.1	33.7	34.2	34.6	35.0	35.4	35.7	36.1	36.4	36.6	36.9	37.1	37.3	37.5
38.5 39.0	26.1 27 26.4 28	.0 27.2 .2 29.6	30.8	31.7	32.6	33.3	34.0	34.5	35.1	35.5	35.9	36.3	36.7	37.0	37.3	37.6	37.8	38.1	38.3	38.5
39.5	26.7 28	.5 30.0	31.1	32.1	33.0	33.7	34.4	35.0	35.5	36.0	36.4	36.8	37.2	37.5	37.8	38.1	38.3	38.6	38.8	39.0
40.0 40.5	27.1 28 27.4 29	• 7 30•3 • 2 30•7	31.9	32.9	33.8	34.6	35.3	35.9	36.4	36.9	37.3	37.7	38.1	38.4	38.7	39.0	39.3	39.6	39.8	40.0
41.0	27.7 29	.6 31.1	32.3	33.4	34.2	35.0	35.7	36.3	36.8	37.3	37.8	38.2	38.6	38.9	39.2	39.5	39.8	40.0	40.3	40.5
41.5 42.0	28.1 30 28.4 30	.0 31.3 .3 31.8	33.1	34.2	35.1	35.9	36.6	37.2	37.7	38.2	38.7	39.1	39.5	39.8	40.2	40.5	40.8	41.0	41.3	41.5
42.5	28.7 30	.7 32.2	33.5	34.6	35.5	36.3	37.0	37.6	38.2	38.7	39.2	39.6	40.0	40.3	40.6	41.0	41.2	41.5	41.7	42.0
43.0 43.5	29.1 31 29.4 31	.0 32.6 .4 33.0	33.9	35.4	36.3	37.1	37.9	38.5	39.1	39.6	57.0 40.1	40.5	40.9	41.3	41.6	41.9	42.2	42.5	42.7	43.0
44.0	29.7 31	.7 33.3	34.7	35.8	36.7	37.6	38.3	38.9	39.5	40.1	40.5	41.0	41.4	41.7	42.1	42.4	42.7	43.0	43.2	43.5
44.5 45.0	30.1 32 30.4 32	.5 34.1	35.4	36.6	37.6	38.4	39.2	39.8	40.4	41.0	41.5	41.9	42.3	42.7	43.0	43.4	43.7	43.9	44.2	44.4
45.5	30.7 32	.8 34.5	35.8	37.0	38.0	38.8	39.6	40.3	40.9	41.4	41.9	42.4	42.8	43.2	43.5	43.8	44.1	44.4	44.7	44.9
46.0 46.5	31.1 33 31.4 33	.2 34.8	36.2	37.4	38.4	39.3	40.0	40.7	41.3	41.9	42.4	42.8	43.2	43.6	44.0	44.3	44.0	44.9	45.2	45.4
47.0	31.7 33	.9 35.6	37.0	38.2	39.2	40.1	40.9	41.6	42.2	42.8	43.3	43.8	44.2	44.6	44.9	45.3	45.6	45,9	46.2	46.4
47.5 48.0	32.1 34 32.4 34	.2 36.0	37.4	38.6	39.6	40.5	41.3	42.0	42.7	43.2	43.7	44.2	44.7	45.1	45.4	45.8	46.1	46.4	46.7	46.9
48.5	32.7 35	.0 36.7	38.2	39.4	40.5	41.4	42.2	42.9	43.6	44.1	44.7	45.1	45.6	46.0	46.4	46.7	47.0	47.4	47.6	47.9
49.0 49.5	33.1 35 33.4 35	.3 37.1	38.6	39.8	40.9	41,8	42.6	43.4	44.0	44.6	45.1	45.6	46.1	46.5	46.8	47.2	47.5	47.8	48.1	48.4
50.0	33.7 36	0 37.8	39.4	40.6	41.7	42.7	43.5	44.2	44.9	45.5	46.0	46.5	47.0	47.4	47.8	48.2	48.5	48.8	49.1	49.4

STUMP DOB	0.0 0.2 0.4	0.6 0.8 1.0	1.2 1.4	MP HEIGHT (I 1.6 1.8 2.	N FEET)	2.6 2.8	3.0 3.2 3	,4 3.6 3.8 4.0
5.0 5.5	3.3 3.5 3.7 3.6 3.8 4.0	3.8 3.9 4.0 4.2 4.3 4.5		4.3 4.4 4.				.8 4.8 4.9 4.9 .3 5.3 5.4 5.4
6.0 6.5	3.9 4.2 4.4 4.2 4.5 4.7	4.6 4.7 4.9 4.9 5.1 5.3		5.2 5.3 5. 5.6 5.7 5.				.8 5.8 5.9 5.9 .2 6.3 6.3 6.4
7.0	4.5 4.8 5.1	5.3 5.5 5.7	5.8 5.9	6.0 6.1 6.	2 6.3 6.4	6.5 6.5		.7 6.8 6.8 6.9
7.5 8.0	4.9 5.2 5.5 5.2 5.5 5.8	5.7 5.9 6.1 6.1 6.3 6.5		6.5 6.6 6. 6.9 7.0 7.				.2 7.3 7.3 7.4 .7 7.8 7.8 7.9
8.5	5.5 5.9 6.2	6.4 6.7 6.8		7.3 7.4 7.				.2 8.2 8.3 8.4
9.0 9.5	5.8 6.2 6.5 6.1 6.5 6.9	6.8 7.0 7.2 7.2 7.4 7.6		7.7 7.9 8. 8.2 8.3 8.				.6 8.7 8.8 8.9 .1 9.2 9.3 9.3
10.0	6.4 6.9 7.2	7.5 7.8 8.0	8.2 8.4	8.6 8.7 8.	9 9.0 9.1	9.2 9.3	9.4 9.5 9	.6 9.7 9.8 9.8
10.5 11.0	6.8 7.2 7.6 7.1 7.6 8.0	7.9 8.2 8.4 8.3 8.6 8.8		9.0 9.2 9.		9.7 9.8	9.9 10.0 10	.1 10.2 10.2 10.3 .6 10.6 10.7 10.8
11.5	7.4 7.9 8.3	8.7 9.0 9.2	9.5 9.7	9.9 10.0 10.	2 10.3 10.5	10.6 10.7 1	0.8 10.9 11	.0 11.1 11.2 11.3
12.0 12.5	7.7 8.2 8.7 8.0 8.6 9.0	9.0 9.3 9.6 9.4 9.7 10.0						.5 11.6 11.7 11.8 .0 12.1 12.2 12.3
13.0	8.3 8.9 9.4	9.8 10.1 10.4	10.7 10.9 1	1.1 11.3 11.	5 11.7 11.8	12.0 12.1 1	2.2 12.4 12	.5 12.6 12.7 12.8
13.5 14.0								.9 13.1 13.2 13.3 .4 13.5 13.6 13.8
14.5	9.2 9.9 10.4	10.9 11.2 11.6	11.9 12.1 1	2.4 12.6 12.	8 13.0 13.2	13.3 13.5 1	3.6 13.8 13	.9 14.0 14.1 14.2
15.0 15.5								.4 14.5 14.6 14.7 .9 15.0 15.1 15.2
16.0 16.5								.3 15.5 15.6 15.7 .8 15.9 16.1 16.2
17.0								.3 16.4 16.6 16.7
17.5 18.0								.8 16.9 17.0 17.2 .2 17.4 17.5 17.7
18.5	11.7 12.5 13.2	13.8 14.3 14.7	15.1 15.4 1	5.7 16.0 16.	3 16.5 16.8	17.0 17.2 1	漢,4 17.5 17	.7 17.9 18.0 18.2
19.0 19.5								1.2 18.3 18.5 18.7 1.7 18.8 19.0 19.1
20.0	12.6 13.5 14.2	14.8 15.4 15.8	16.3 16.6 1	7.0 17.3 17.	6 17.8 18.1	18.3 18.5 1	8.8 18.9 19	1.1 19.3 19.5 19.6
20.5 21.0								1.6 19.8 20.0 20.1 1.1 20.3 20.4 20.6
21.5	13.5 14.4 15.2	15.9 16.5 17.0	17.4 17.9 1	8.2 18.6 18.	9 19.2 19.4	19.7 19.9 2	0.1 20.4 20	.6 20.7 20.9 21.1
22.0 22.5								.0 21.2 21.4 21.6 .5 21.7 21.9 22.1
23.0	14.4 15.4 16.2	17.0 17.6 18.1	18.6 19.1 1	9.5 19.8 20.	2 20.5 20.8	21.0 21.3 2	1.5 21.8 22	.0 22.2 22.4 22.6
23.5 24.0	14.7 15.7 16.6	17.3 18.0 18.5	19.0 19.5 1	19.9 20.2 20. 20.3 20.7 21.	5 20.9 21.2 5 21.3 21.6	21.5 21.7 2	2.0 22.2 22 2.5 22.7 22	.4 22.7 22.9 23.1 .9 23.1 23.3 23.5
24.5	15.2 16.3 17.3	18.0 18.7 19.3	19.8 20.3 2	20.7 21.1 21.	4 21.8 22.1	22.4 22.7 2	2.9 23.2 23	.4 23.6 23.8 24.0
25.0 25.5								.9 24.1 24.3 24.5 .3 24.6 24.8 25.0
26.0	16.1 17.3 18.3	19.1 19.8 20.4	21.0 21.5 2	1.9 22.3 22.	7 23.1 23.4	23.7 24.0 2	4.3 24.6 24	.8 25.0 25.3 25.5
26.5 27.0								.3 25.5 25.8 26.0 .8 26.0 26.2 26.5
27.5								.2 26.5 26.7 27.0
28.0 28.5								.7 27.0 27.2 27.4 .2 27.4 27.7 27.9
29.0 29.5								'.6 27.9 28.2 28.4 1.1 28.4 28.7 28.9
30.0	18.4 19.8 20.9	21.9 22.7 23.4	24.1 24.6 2	5.2 25.7 26.	1 26.5 26.9	27.3 27.6 2	8.0 28.3 28	.6 28.9 29.1 29.4
30.5 31.0								0.1 29.3 29.6 29.9 0.5 29.8 30.1 30.4
31.5	19.3 20.7 21.9	22.9 23.8 24.5	25.2 25.8 2	26.4 26.9 27.	4 27.8 28.2	28.6 29.0 2	9.3 29.7 30	.0 30.3 30.6 30.9
32.0 32.5								0.5 30.8 31.1 31.3 0.9 31.2 31.5 31.8
33.0	20.1 21.6 22.9	23.9 24.8 25.6	26.4 27.0 2	27.6 28.1 28.	6 29.1 29.6	30.0 30.4 3	0.7 31.1 31	.4 31.7 32.0 32.3
33.5 34.0								9 32.2 32.5 32.8 2.3 32.7 33.0 33.3
34.5 35.0	20.9 22.5 23.8	24.9 25.9 26.7	27.5 28.2 2	8.8 29.4 29.	9 30.4 30.9	31.3 31.7 3	2.1 32.5 32	.8 33.1 33.5 33.8
35.5								1.3 33.6 33.9 34.3 1.7 34.1 34.4 34.8
36.0 36.5	21.8 23.4 24.8	25.9 26.9 27.8	28,6 29,3 3	30.0 30.6 31.	2 31.7 32.2	32,6 33.0 3	3.5 33.8 34	2 34.6 34.9 35.2 7 35.0 35.4 35.7
37.0	22.3 24.0 25.4	26.6 27.6 28.6	29.4 30.1 3	30.8 31.4 32.	0 32.5 33.0	33.5 33.9 3	4.4 34.8 35	.2 35.5 35.9 36.2
37.5 38.0								6.6 36.0 36.4 36.7 0.1 36.5 36.8 37.2
38.5	23.1 24.9 26.4	27.6 28.7 29.7	30.5 31.3 3	32.0 32.6 33.	2 33.8 34.3	34.8 35.3 3	5.7 36.2 36	6 36.9 37.3 37.7
39.0 39.5	23.4 25.2 26.7	27.9 29.0 30.0 28.3 29.4 30.4	30.9 31.7 3 31.3 32.1 3	12.4 33.0 33. 12.8 33.4 34.	7 34.2 34.8 1 34.6 35.2	35.3 35.7 3 35.7 36.2 3	6.2 36.6 37 16.6 37.1 37	'.0 37.4 37.8 38.2 '.5 37.9 38.3 38.6
40.0	23.9 25.8 27.3	28.6 29.7 30.7	31.6 32.4 3	33.2 33.9 34.	5 35.1 35.6	36.1 36.6 3	7.1 37.5 38	1.0 38.4 38.8 39.1
40.5 41.0								3.4 38.8 39.2 39.6 3.9 39.3 39.7 40.1
41.5	24.7 26.7 28.3	29.6 30.8 31.8	32.7 33.6 3	34.4 35.1 35.	7 36,3 36.9	37.5 38.0 3	18.5 38.9 39	0.4 39.8 40.2 40.6
42.0 42.5	25.3 27.2 28.9	30.3 31.5 32.5	33.5 34.4 3	35.1 35.9 36.	5 37.2 37.8	38.3 38.9 3	19.4 39.8 40).8 40.3 40.7 41.1).3 40.7 41.1 41.6
43.0 43.5	25.5 27.5 29.2	30.6 31.8 32.9	33.9 34.7 3	35.5 36.3 37.	0 37.6 38.2	38.8 39.3 3	19.8 40.3 40	0.8 41.2 41.6 42.0 41.7 42.1 42.5
44.0	26.1 28.1 29.8	31.2 32.5 33.6	34.6 35.5 3	36.3 37.1 37.	8 38.4 39.1	39.6 40.2 4	0.7 41.2 41	.7 42.1 42.6 43.0
44.5 45.0	26.3 28.4 30.1	31.6 32.8 34.0	35.0 35.9 3	36.7 37.5 38.	2 38.9 39.5	40.1 40.6 4	1.2 41.7 42	1.2 42.6 43.1 43.5 1.6 43.1 43.5 44.0
45.5	26.8 29.0 30.7	32.2 33.5 34.7	35.7 36.6 3	37.5 38.3 39.	0 39.7 40.3	40.9 41.5 4	2.1 42.6 43	1.1 43.6 44.0 44.5
46.0 46.5								3.6 44.0 44.5 44.9 3.0 44.5 45.0 45.4
47.0	27.6 29.8 31.6	33.2 34.5 35.7	36.8 37.8 3	38.7 39.5 40.	2 41.0 41.6	42.3 42.9 4	3.4 44.0 44	.5 45.0 45.5 45.9
47.5 48.0	27.7 30.1 31.9 28.1 30.4 32.2	33.5 34.9 36.1 33.8 35.2 36.4	37.2 38.1 3 37.5 38.5 3	39.0 39.9 40. 39.4 40.3 41.	0 41.4 42.0 1 41.8 42.5	42.7 43.3 4	3.9 44.4 44	,,9 45.4 45.9 46.4 5.4 45.9 46.4 46.9
48.5	28.4 30.7 32.5	34.1 35.5 36.8	37.9 38.9 3	39.8 40.7 41.	5 42.2 42.9	43.6 44.2 4	4.8 45.3 45	5.9 46.4 46.9 47.4
49.0 49.5	28.9 31.2 33.1	34.8 36.2 37.5	38.6 39.6 4	0.6 41.5 42.	3 43.0 43.7	44.4 45.1 4	5.7 46.2 46	0.3 46.9 47.4 47.9 5.8 47.3 47.8 48.3
50.0								7.3 47.8 48.3 48.8

STUMP DOB	0.0	0.2	0.4	0.6	0.8	1.0	1.2	S'	TUMP	HEIGH'				2.6		3.0	3.2	3.4	3,6	3.8	4.0
5.0 5.5	2.9 3.2	3·2 3·5	3.4 3.7	3.5 3.9	3.7 4.1	3.8	3.9 4.3	4.1	4.2	4.2	4.3	4.4	4.5	4.5	4.6	4.7	4.7	4.8	4.8	4.9	4.9
6.0	3.5	3.8	4.0	4.3	4.4	4.2	4.7	4.9	5.0	5.1	5.2	5.3	5.4	5.0 5.4	5.1 5.5	5.1 5.6	5.2 5.7	5.2 5.7	5.3 5.8	5.3 5.8	5.4 5.9
6.5 7.0	3.8 4.1	4.1	4.4	4.6 5.0	4.8 5.2	5.0 5.4	5.1 5.5	5.3 5.7	5.4 5.8	5.5 6.0	5.6 6.1	5.7 6.2	5.8 6.3	5.9 6.4	6.0	6.1	6.1	6.2	6.3	6.3	6.4
7.5	4.4	4.7	5.1	5.3	5.6	5.8	5.9	6.1	6.2	6.4	6.5	6.6	6.7	6.8	6.9	7.0	7.1	7.1	7.2	7.3	7.4
8.0 8.5	4.7 5.0	5.1 5.4	5.4 5.7	5.7 6.0	5.9 6.3	6.1	6.3	6.5	6.7 7.1	6.8 7.2	6.9 7.4	7.1 7.5	7.2 7.6	7.3 7.7	7.4 7.8	7.5 7.9	7.5 8.0	7,6 8,1	7.7 8.2	7.8°	7.8
9.0	5.3	5.7	6.1	6.4	6.7	6.9	7.1	7.3	7.5	7.7	7.8	7.9	8.1	8.2	8.3	8.4	8.5	8.6	8.7	8.7	8.8
9.5 10.0	5.5 5.8	6.0	6.4	6.8 7.1	7.1 7.4	7.3 7.7	7.5 7.9	7.7 8.1	7.9 8.3	8.1 8.5	8.2 8.7	8.4 8.8	8.5 9.0	8.6 9.1	8.8 9.2	8.9 9.3	9.0	9.1	9.1	9.2	9.3 9.8
10.5	6.1	6.7	7.1	7.5	7.8	8.1	8.3	8.6	8.8	8.9	9.1	9.3	9.4	9.6	9.7	9.8	9.9	10.0	10.1	10.2	10.3
11.0 11.5	6.4	7.0 7.3	7.5 7.8	7.8 8.2	8.2 8.6	8.5 8.9	8.7 9.1	9.0 9.4	9.2 9.6	9.4 9.8	9.6	9,7 10,2		10.0							
12.0	7.0	7.6	8.1	8.6	8.9	9.3	9.5	9.8	10.0	10.2	10.4	10.6	10.8	10.9	11.1	11.2	11.3	11.4	11.6	11.7	11.8
12.5 13.0	7.3	8.0	8.5 8.8	8.9 9.3	9.3 9.7	9.6								11.4							
13.5 14.0	7.9 8.2	8.6 9.0	9.2		10.1	10.4	10.8	11.0	11.3	11.5	11.7	11.9	12.1	12.3	12.5	12.6	12.8	12.9	13.0	13.1	13.2
14.5	8.5	9.3	9.9	10.4	10.8	11.2	11.6	11.9	12.1	12.4	12.6	12.8	13.0	12.8	13.4	13.6	13.7	13.8	14.0	14.1	14.2
15.0 15.5	8.8 9.1		10.2	10.8	11.2	11.6	12.0	12.3	12.6	12.8	13.1	13.3	13.5	13.7	13.9	14.0	14.2	14.3	14.5	14.6	14.7
16.0	9.5	10.3	10.9	11.5	12.0	12.4	12.8	13.1	13.4	13.7	13.9	14.2	14.4	14.6	14.8	15.0	15.1	15.3	15.4	15.6	15.7
16.5 17.0	9,8	10.6	11.3	11.9	12.4	12.8	13.2	13.5	13.8	14.1	14.4	14.6	14.9	15.1	15.3	15.4	15.6	15.8	15.9	16.1	16.2
17.5	10.4	11.2	12.0	12.6	13.1	13,6	14.0	14.4	14.7	15.0	15.3	15.5	15.8	16.0	16.2	16.4	16.6	16.7	16.9	17.0	17.2
18.0 18.5	10.7	11.6	12.7	13.0	13.5	14.0	14.4	14.8	15.1	15.4	15.7	16.0	16.2	16.4	16.6	16.8	17.0	17.2	17.4	17.5	17.7
19.0	11.3	12.2	13.0	13.7	14.3	14.8	15.2	15.6	16.0	16.3	16.6	16.9	17.1	17.4	£7.6	17.8	18.0	18.2	18.3	18.5	18.6
19.5 20.0	11.0	12.9	13.4	14.1	14.6	15.2	15.6	16.4	16.4	15.7	17.0 17.5	17.3 17.8	17.6	17.8 18.3	18.5	18.3	18.5	18.6	18.8	19.0	19.1
20.5	12.2	13.2	14.1	14.8	15.4	16.0	16.4	16.9	17.2	17.6	17.9	18.2	18.5	18.7	19.0	19.2	19.4	19.6	19.8	20.0	20.1
21.0 21.5														19.2 19.7							
22.0	13.1	14.2	15.1	15.9	16.6	17.2	17.7	18.1	18.5	18.9	19.3	19.6	19.9	20.1	20.4	20.6	20.8	21.0	21.2	21.4	21.6
22.5 23.0														20.6							
23.5 24.0	14.1	15.2	16.2	17.0	17.7	18.4	18.9	19.4	19.8	20.2	20.6	20.9	21.2	21.5	21.8	22.0	22.3	22.5	22.7	22.9	23.1
24.5	14.7	15.9	16.9	17.8	18.5	19.2	19.7	20.2	20.7	21.1	21.5	21.8	22.1	22.0	22.7	23.0	23.2	23.5	23.7	23.9	24.1
25.0 25.5	15.0	16.3	17.3	18.2	18.9	19.6	20.1	20.6	21.1	21.5	21.9	22.3	22.6	22.9	23.2	23.5	23.7	23.9	24.2	24.4	24.6
26.0	15.6	16.9	18.0	18.9	19.7	20.4	21.0	21.5	22.0	22.4	22.8	23.2	23.5	23.8	24.1	24.4	24.7	24.9	25.1	25.3	25.5
26.5 27.0														24.3 24.8							
27.5	16.6	18.0	19.1	20.0	20.8	21.6	22.2	22.8	23.3	23.7	24.2	24.5	24.9	25.2	25.5	25.8	26.1	26.3	26.6	26.8	27.0
28.0 28.5	17.2	18.3	19.4	20.4	21.2	22.4	22.6	23.2	23.7	24.2	24.6	25.0	25.4	25.7 26.2	26.0	26.3	26.6	26.8	27.1	27.3	27.5
29.0	17.5	19.0	20.2	21.2	22.0	22.8	23.4	24.0	24.6	25.1	25.5	25.9	26.3	26.6	26.9	27.3	27.5	27.8	28.0	28.3	28.5
29.5 30.0	18.2	19.7	20.9	21.9	22.8	23.6	24.3	24.9	25.4	25.9	26.4	26.8	27.2	27.1	27.4	28.2	28.5	28.3	29.0	29.3	29.5
30.5 31.0	18.5	20.0	21.3	22.3	23.2	24.0	24.7	25.3	25.9	26.4	26.8	27.3	27.7	28.0 28.5	28.4	28.7	29.0	29.2	29.5	29.7	30.0
31.5	19.1	20.7	22.0	23.1	24.0	24.8	25.5	26.2	26.7	27.3	27.7	28.2	28.6	29.0	29.3	29.6	29.9	30.2	30.5	30.7	31.0
32.0 32.5	19.4	21.0	22.3	23.4	24.4	25.2	25.9	26.6	27.2	27.7	28.2	28.6	29.0	29.4 29.9	29.8	30.1	30.4	30.7	31.0	31.2	31.5
33.0	20.1	21.7	23.1	24.2	25.2	26.0	26.8	27.4	28.0	28.6	29.1	29.5	30.0	30.4	30.7	31.1	31.4	31.7	31.9	32.2	32.4
33.5 34.0	20.4	22.1	23.4	24.6	25,6	26,4	27.2	27.9	28.5	29.0	29.5	30.0	30.4	30.8	31.2	31.5	31.9	32.1	32.4	32.7	32.9
34.5	21.1	22.8	24.2	25.4	26.4	27.3	28.0	28.7	29.4	29.9	30.4	30.9	31.4	31.8	32.1	32.5	32.8	33.1	33.4	33.7	33.9
35.0 35.5	21.7	23.5	24.9	26.1	27.2	28.1	28.9	29.2	30.2	30.4	30.9	31.4	31.8	32.2 32.7	32.6	33.0	33.3	33.6	33.9	34.2	34.4
36.0 36.5	22.0	23.8	25.3	26.5	27.6	28.5	29.3	30.0	30.7	31.3	31.8	32.3	32.7	33.2	33.6	33.9	34.3	34.6	34.9	35.1	35.4
37.0														33.6 34.1							
37.5 38.0	23.0	24.9	26.4	27.7	28.8	29.7	30.6	31.3	32.0	32.6	33.2	33.7	34.1	34.6	35.0	35.4	35.7	36.0	36.3	36.6	36.9
38.5	23.7	25.6	27.1	28.4	29.6	30.5	31.4	32.2	32.9	33.5	34.1	34.6	35.1	35.5	35.9	36.3	36.7	37.0	37.3	37.6	37.9
39.0 39.5														36.0 36.5							
40.0	24.6	26.6	28.2	29.6	30.8	31.8	32.7	33.5	34.2	34.8	35.4	36.0	36.5	36.9	37.3	37.7	38.1	38.5	38.8	39.1	39.4
40.5 41.0														37.4 37.9							
41.5	25.6	27.7	29.4	30.8	32.0	33.0	33.9	34.8	35.5	36.2	36.8	37.3	37.9	38.3	38.8	39.2	39.6	39.9	40.2	40.6	40.8
42.0 42.5														38.8 39.3							
43.0 43.5	26.6	28.7	30.5	31.9	33.2	34.3	35.2	36.1	36.8	37.5	38.2	38.7	39.3	39.7	40.2	40.6	41.0	41.4	41.7	42.0	42.3
44.0	27.3	29.5	31.2	32.7	34.0	35.1	36.1	36.9	37.7	38.4	39.1	39.7	40.2	40.2	41.2	41.6	42.0	42.3	42.7	43.0	43.3
44.5 45.0	27.0	29.8	31.0	33.1	34.4	35.5	36.5	37.4	38.2	38.9	39.5	40.1	40.7	41.2	41.6	42.1	42.5	42.8	43.2	43.5	43.8
45.5	28.3	30.5	32.4	33.9	35.2	36.3	37.4	38.3	39.1	39.8	40.4	41.0	41.6	42.1	42.6	43.0	43.4	43.8	44.2	44.5	44.8
46.0 46.5	28.6	30.9	32.7	34.3	35.6	36.8	37.8	38.7	39.5	40.2	40.9	41.5	42.1	42.6 43.1	43.1	43.5	43.9	44.3	44.6	45.0	45.3
47.0	29.3	31.6	33.5	35.1	36.4	37.6	38.6	39.6	40.4	41.1	41.8	42.4	43.0	43.5	44.0	44.5	44.9	45.3	45.6	46.0	46.3
47.5 48.0														44.0							
48.5	30.3	32.7	34.6	36.3	37.7	38,9	39.9	40.9	41.7	42.5	43.2	43.8	44.4	45.0	45.4	45.9	46.3	46.7	47.1	47.4	47.8
49.0 49.5	31.0	33.4	35.4	37.1	38.5	39.7	40.8	41.8	42.6	43.4	44.1	44.8	45.4	45.4 45.9	46.4	46.9	47.3	47.7	48.1	48.4	48.8
50.0	31.3	33.8	35.8	37.4	38.9	40.1	41.2	42.2	45.1	43.9	44.6	45.2	45.8	46.4	46.9	47.4	47.8	48.2	48.6	48.9	49.3

	EQUATION ESTIMATES OF D.S.H. BY STOMP DOD AND STOMP
STUMP DDB	0.0 0.2 0.4 0.6 0.8 1.0 1.2 1.4 1.6 1.8 2.0 2.2 2.4 2.6 2.8 3.0 3.2 3.4 3.6 3.8 4.0
5.0 5.5	3.2 3.4 3.6 3.8 3.9 4.0 4.1 4.2 4.3 4.7 4.8 4.9 5.0 5.0 5.1 5.2 5.2 5.2 5.3 5.3 5.4 5.4 3.5 3.8 4.0 4.2 4.3 4.4 4.6 4.7 4.8 4.9 5.0 5.0 5.0 5.6 5.7 5.7 5.8 5.8 5.9 5.9 5.9 5.9 5.9 5.9 5.9 5.9 5.9 5.9
6.0 6.5	4.2 4.5 4.7 4.9 5.1 5.2 5.4 5.5 5.6 5.7 5.8 5.9 5.9 6.5 6.6 6.7 6.8 6.8 6.9
7.0 7.5	4.8 5.1 5.4 5.6 5.9 6.0 6.2 6.3 6.4 6.6 6.7 6.8 6.9 6.9 7.0 7.1 7.1 7.2 7.3 7.4 7.5 7.5 7.6 7.7 7.8 7.8 7.9
8.0 8.5	5.1 5.5 5.8 6.0 6.2 6.4 6.6 6.8 7.0 7.2 7.3 7.4 7.5 7.7 7.8 7.8 7.9 8.0 8.1 8.2 8.2 8.3 8.4 5.4 5.8 6.1 6.4 6.6 6.8 7.0 7.2 7.3 7.4 7.5 7.7 7.8 7.8 7.8 7.8 7.9 8.0 8.1 8.2 8.3 8.4 8.5 8.6 8.6 8.7 8.8 8.8
9.0 9.5	5.7 6.1 6.5 6.7 7.0 7.4 7.6 7.8 8.0 8.1 8.3 8.4 8.5 8.7 8.8 8.9 9.0 9.0 9.1 9.2 9.3 9.8
10.0	6.3 6.8 7.1 7.5 7.7 8.0 8.2 8.4 8.6 8.7 9.3 9.4 9.6 9.7 9.8 9.9 10.0 10.1 10.2 10.2 10.3 6.6 7.1 7.5 7.8 8.1 8.4 8.6 8.8 9.0 9.1 9.3 9.4 9.6 9.7 9.8 9.9 10.3 10.5 10.5 10.6 10.7 10.8
10.5	A.Y /.4 /.0 0.6 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.7
11.5 12.0	7.5 8.1 8.5 8.9 9.2 9.5 9.8 10.0 10.2 10.4 10.6 10.7 10.9 11.6 11.7 11.9 12.0 12.1 12.2 12.3
12.5 13.0	8 7 9 2 9 6 10 0 10 3 10 6 10 8 11 1 11 2 11 2 11 3 11 3 11 3 11 3 11
13.5 14.0	- a 7 9.3 9.9 10.3 10.7 11.1 11.7 11.4 14.7 14.4 14.4 14.4 14
14.5 15.0	- 0 2 10 0 10.5 11.0 11.2 11.0 12.0 16.6 16.7 16.7 16.7 Tarri Tarri Tarri Tarri 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.
15.5 16.0	9.5 10.3 10.9 11.4 11.0 12.2 12.9 13.5 13.8 14.0 14.2 14.4 14.6 14.8 15.0 15.1 15.3 15.4 15.0 15.1
16.5 17.0	10.1 10.9 11.5 12.1 12.9 13.3 13.7 14.0 14.3 14.6 14.9 15.1 15.3 15.5 15.7 15.9 16.1 16.2 16.4 16.9 16.4 16.9 16.4 16.9 16.4 16.9 17.2 16.4 16.9 16.4 16.9 17.2 16.4 16.5 16.7 16.9 17.0 17.2
17.5	- 10 7 11.5 12.7 17.8 19.9 19.1 17.4 17.7 47.7 """ """ " " " " / 14 4 64 8 17 6 17.7 17.3 17.9 17.1
18.0 18.5	- 11 0 10 1 10.8 14.0 14.0 17.0 17.7 17.7 17.7 47.7 47.7 47.7 5 5 5 5 5 5 5 5 5 7 7 17 0 18.1 18.4 10.0 10.0 1
19.0 19.5	1
20.0 20.5	- 14 2 12 2 14 1 14 8 12 4 12 7 12 7 12 7 12 7 12 7 1 7 7 7 7 7 7
21.0 21.5	12 9 13.9 14.8 13.2 16.1 16.1 16.1 17.4 4/** **** **** **** **** *** * * * * *
22.0 22.5	13.1 14.2 15.1 15.6 16.2 17.4 17.9 18.4 18.8 19.2 19.5 19.8 20.1 20.4 20.7 20.9 21.2 21.4 21.6 21.6 22.5
23.0 23.5	13.7 14.8 15.7 16.5 17.5 18.1 18.6 19.1 19.6 20.0 20.3 20.7 21.0 21.3 21.6 21.8 22.1 22.5 22.6 23.3 23.5
24.0 24.5	14.2 15.4 16.3 17.2 17.9 16.3 17.0 17.0 17.0 17.0 17.0 17.0 17.0 17.0
25.0 25.5	14.7 16.0 1/.0 1/.0 16.5 16.5 17.2 17.5 20.7 21.1 21.6 22.0 22.4 22.7 23.1 23.4 23.7 23.9 24.2 24.5 24.7 24.9 25.4 25.6 26.6 27.7 23.9 24.2 24.7 24.9 25.2 25.4
26.0	15.3 16.5 17.6 16.7 17.7 27.7 27.7 27.7 27.7 27.7 27.7 27
27.0	15.8 17.1 18.2 19.1 17.7 20.6 21.2 21.2 21.2 22.7 23.2 23.6 24.0 24.4 24.8 25.1 25.5 25.8 26.1 26.4 26.4 26.8 27.1 27.4 28.2 27.4 27.4 27.4 27.4 27.4 27.4 27.4 27
27.5 28.0	16 3 17.7 18.8 19.8 20.0 21.0 26.0 66.0 66.0 E. T.
28.5 29.0	16 R 18.2 19.4 20.4 21.3 26.0 26.1 42.2 42.2 42.2 42.2 42.2 42.2 42.2 42
29.5 30.0	- 17 % 18.8 20.0 21.0 21.0 21.0 Entry 62.7 61.4 Million Till
30.5 31.0	17 R 19 3 20 6 21 / 22 0 23 7 27 4 27 0 27 0 27 0 27 0 2 0 1 20 1 20 1 20
31.5 32.0	18.0 19.6 20.9 22.0 22.7 23.6 24.9 25.5 26.2 26.8 27.3 27.8 28.3 28.7 29.1 29.5 29.9 30.2 30.6 30.9 31.2 18.3 19.9 21.2 22.3 23.3 24.1 24.9 25.5 26.2 26.8 27.3 27.8 28.3 28.7 29.1 29.5 29.9 30.2 30.6 30.7 31.1 31.4 31.7
32.5 33.0	18.5 20.1 21.5 22.6 23.6 24.8 25.6 26.3 26.9 27.5 28.1 28.6 29.1 29.6 30.0 30.4 30.8 31.2 31.5 31.9 32.4 32.7 32.7
33.5 34.0	19.0 20.7 22.0 23.2 24.6 25.5 26.3 27.0 27.7 28.3 28.9 29.4 29.9 30.4 30.9 31.3 31.7 32.1 32.5 32.8 33.7
34.5 35.0	19.5 21.5 22.0 23.0 24.7 23.0 27.8 28.5 29.1 29.7 30.3 30.8 31.3 31.7 32.2 32.6 33.0 33.4 33.0 34.5 32.7 32.7 32.7 32.7 32.7 32.7 32.7 32.7
35.5	10 9 21.7 23.2 24.4 22.2 20.2 20.2 20.4 40.4 40.4 40
36.0 36.5	20 4 22 2 23 8 23 0 20 4 21 4 20 0 60 0 60 0 60 0 60 0 60 0 60 0 60
37.0 37.5	20 Q 22 R 24 3 25 6 25 6 26 C C C C C C C C C C C C C C C C C
38.0 38.5	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
39.0 39.5	
40.0 40.5	22 2 26.0 27.4 20.7 27.0 20.0 24.1 24.1 26.7 27.7 27.7 2 2 2 2 2 2 2 2 2 2 2 2 2 2
41.0 41.5	22.4 24.5 26.2 27.7 27.0 30.1 31.1 32.1 32.1 34.8 35.5 36.2 36.8 37.4 37.9 38.5 39.0 39.5 37.9 40.4
42.0 42.5	22.9 25.0 26.8 26.3 27.0 31.0 31.0 31.0 32.0 33.1 34.0 34.8 35.6 36.3 37.0 37.6 38.2 38.8 39.4 39.9 40.4 40.9 41.4 41.8
43.0 43.5	23,3 25,5 27,3 28,9 20,4 31,7 32,8 33,8 34,7 35,6 36,4 37,1 37,8 38,5 39,1 39,7 40,2 40,8 41,3 41,8 42,3 42,8
44.0 44.5	23.7 26.0 27.8 27.4 30.0 32.1 33.2 33.5 36.3 37.1 37.9 38.6 39.3 39.9 40.5 41.1 41.7 42.3 42.6 43.8
45.0	24.1 26.5 28.6 30.0 31.4 32.7 33.0 34.2 35.2 36.2 37.1 37.9 38.7 39.4 40.1 40.8 41.4 42.0 42.0 42.0 43.2 43.7 44.7
45.5	2/ 6 26.4 28.4 30.0 32:0 22:2 37:7 27:7 27:7 7:1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
46.5 47.0	28 A 37.4 39.4 31.1 32.0 33.7 32.1 34.4 37.4 3.4 3.4 3.4 3.4 3.4 3.4 3.4 4.4 45.0 43.0 40.4
47.5 48.0	25.2 27.6 29.9 31.4 32.7 34.5 35.8 36.9 38.0 38.9 39.8 40.6 41.4 42.2 42.9 43.6 44.2 44.9 45.7 46.1 46.2 57.9 29.9 31.7 33.2 34.6 35.8 36.9 38.0 38.9 39.8 40.6 41.4 42.2 42.9 43.6 44.2 44.9 45.7 46.7 47.1
48.5 49.0	25.6 28.1 30.2 31.9 33.0 34.7 30.1 31.9 31.9 30.5 37.6 40.6 41.4 42.2 43.0 43.7 44.5 45.1 45.8 40.4 41.0 41.0 41.0 41.8 48.1 48.1 48.1 48.1 48.1 48.1 48.1
49.5 50.0	26.0 28.5 30.7 32.5 34.1 35.5 36.8 37.9 39.0 40.0 40.9 41.8 42.6 43.4 44.2 45.3 46.0 46.7 47.3 48.0 48.6 26.2 28.8 30.9 32.8 34.4 35.8 37.1 38.3 39.4 40.4 41.3 42.2 43.0 43.8 44.6 45.3 46.0 46.7 47.3 48.0 48.6

STUMP DOB	0.0 0.2 0	.4 0.6 0.8		STUMP)			2.6 2.8	3.0 3.2	3.4 3.6	3.8 4.0
5.0 5.5	3.5 3.8 4.	.7 3.9 4.0 .1 4.3 4.5		4.4 4.5	4.5 4.6 5.0 5.1	4.7 4.7 5.1 5.2	5.2 5.3	4.8 4.9 5.3 5.3	4.9 4.9 5.4 5.4	4.9 5.0 5.4 5.5
6.0 6.5 7.0	4.2 4.5 4.	.5 4.7 4.9 .8 5.1 5.3 .2 5.5 5.7	5.0 5.1 5.4 5.6 5.9 6.0	5.3 5.4 5.7 5.8 6.1 6.3	5.4 5.5 5.9 6.0 6.4 6.4	5.6 5.6 6.1 6.1 6.5 6.6	6.2 6.2	5.8 5.8 6.3 6.3 6.8 6.8	5.9 5.9 6.4 6.4 6.8 6.9	5.9 5.9 6.4 6.4 6.9 6.9
7.5 8.0	4.8 5.3 5	.6 5.9 6.1 .0 6.3 6.5	6.3 6.5	6.6 6.7 7.0 7.2	6.8 6.9 7.3 7.4	7.0 7.1 7.5 7.5	7.1 7.2	7.2 7.3 7.7 7.8	7.3 7.4 7.8 7.9	6.9 6.9 7.4 7.4 7.9 7.9
8.5 9.0	5.5 6.0 6	.4 6.7 6.9 .7 7.1 7.3	7.1 7.3 7.6 7.8	7.5 7.6 7.9 8.1	7.7 7.8 8.2 8.3	7.9 8.0 8.4 8.5	8.1 8.2	8.2 8.3 8.7 8.8	8.3 8.4 8.8 8.9	8.4 8.4
9.5 10.0	6.5 7.1 7.	.1 7.5 7.8 .5 7.9 8.2	8.0 8.2 8.4 8.6	8.4 8.5 8.8 9.0	8.7 8.8 9.1 9.2	8.9 9.0 9.4 9.4	9.5 9.6	9.2 9.2 9.7 9.7	9.3 9.3 9.8 9.8	9.4 9.4 9.9 9.9
10.5	7.2 7.8 8	.9 8.3 8.6 .3 8.7 9.0	8.9 9.1 9.3 9.5	9.3 9.4	9.6 9.7 10.1 10.2	10.3 10.4	10.0 10.1	10.7 10.7	10.8 10.8	10.9 10.9
11.5 12.0 12.5	7.8 8.5 9		10.2 10.4 10.6 10.9	10.6 10.8	11.0 11.1	11.3 11.4		11.6 11.7	11.8 11.8	11.9 11.9
13.0	8.5 9.3 9.	.8 10.3 10.7 .2 10.7 11.1	11.0 11.3	11.5 11.7	11.9 12.1	12.2 12.3	12.4 12.5	12.6 12.7	12.7 12.8	12.9 12.9
14.0 14.5	9.2 10.0 10. 9.5 10.4 11.	.6 11.1 11.5 .0 11.5 12.0	11.9 12.2 12.3 12.6	12.4 12.7 12.9 13.1	12.8 13.0 13.3 13.5	13.2 13.3 13.6 13.8	13.4 13.5 13.9 14.0	13.6 13.7 14.1 14.2	13.7 13.8 14.2 14.3	13.9 13.9
15.0 15.5	10.2 11.1 11.	.4 12.0 12.4 .8 12.4 12.8	13.2 13.5	13.8 14.0	14.3 14.4	14.6 14.7	14.9 15.0	15.1 15.1	15.2 15.3	15.3 15.4
16.0 16.5	10.9 11.9 12.		14.1 14.4	14.7 15.0	15.2 15.4	15.5 15.7	15.8 15.9	16.0 16.1	16.2 16.3	16.3 16.4
17.0 17.5 18.0	11.3 12.2 13. 11.6 12.6 13. 12.0 13.0 13.	•4 14.0 14.5	15.0 15.3	15.6 15.9	16.1 16.3	16.5 16.7	16.8 16.9	17.0 17.1	17.2 17.3	17.3 17.4
18.5 19.0	12.3 13.4 14.	.2 14.9 15.4	15.9 16.2	16.6 16.8	17.1 17.3	17.5 17.6	17.8 17.9	18.0 18.1	18.2 18.3	18.3 18.4
19.5 20.0	13.0 14.1 15. 13.4 14.5 15.	.4 16.1 16.7	17.2 17.6	17.9 18.2	18.5 18.7	18.9 19.1	19.2 19.4	19.5 19.6	19.7 19.8	19.8 19.9
20.5 21.0 21.5	13.7 14.9 15. 14.1 15.3 16.	.2 17.0 17.6	18.1 18.5	18.9 19.2	19.5 19.7	19.9 20.1	20.2 20.4	20.5 20.6	20.7 20.8	20.8 20.9
22.0	14.4 15.7 16. 14.8 16.1 17. 15.2 16.4 17.	.0 17.8 18.4	19.0 19.4	19.8 20.1	20.4 20.6	20.9 21.0	21.2 21.3	21.5 21.6	21.7 21.8	21.8 21.9
23.0 23.5	15.5 16.8 17. 15.9 17.2 18.	.8 18.7 19.3	19.9 20.3	20.7 21.1	21.4 21.6	21.8 22.0	22.2 22.3	22.5 22.6	22.7 22.8	22.8 22.9
24.0 24.5	16.3 17.6 18. 16.6 18.0 19.	.7 19.5 20.2 .1 19.9 20.6	20.8 21.3 21.2 21.7	21.7 22.0 22.1 22.5	22.3 22.6 22.8 23.1	22.8 23.0 23.3	23.2 23.3 23.7 23.8	23.5 23.6 24.0 24.1	23.7 23.8 24.2 24.3	23.8 23.9 24.4
25.0 25.5 26.0	17.0 18.4 19. 17.3 18.8 19. 17.7 19.2 20.	.9 20.8 21.5	22.1 22.6	23.1 23.4	23.8 24.0	24.3 24.5	24.7 24.8	24.9 25.1	25.2 25.3	25.3 25.4
26.5 27.0	18.1 19.6 20.		23.0 23.6	24.0 24.4	24.7 25.0	25.3 25.5	25.6 25.8	25.9 26.1	26.2 26.3	26.3 26.4
27.5 28.0	18.8 20.4 21.	.6 22.5 23.3 .0 23.0 23.8	24.0 24.5 24.4 25.0	25.0 25.4 25.4 25.8	25.7 26.0 26.2 26.5	26.2 26.5 26.7 26.9	26.6 26.8 27.1 27.3	26.9 27.1 27.4 27.6	27.2 27.3 27.7 27.8	27.3 27.4 27.8 27.9
28.5 29.0	19.9 21.6 22	.4 23.4 24.2 .8 23.8 24.7	25.3 25.9	26.4 26.8	27.2 27.5	27.7 27.9	28.1 28.3	28.4 28.6	28.7 28.8	28.8 28.9
29.5 30.0 30.5	20.3 22.0 23. 20.7 22.4 23. 21.1 22.8 24.	.7 24.7 25.6	26.3 26.8	27.3 27.8	28.1 28.4	28.7 28.9	29.1 29.3	29.4 29.6	29.7 29.8	29.8 29.9
31.0 31.5	21.4 23.2 24	.5 25.6 26.5	27.2 27.8	28.3 28.7	29.1 29.4	29.7 29.9	30.1 30.3	30.4 30.6	30.7 30.8	30.8 30.9
32.0 32.5	22.2 24.0 25	.4 26.5 27.4 .8 26.9 27.8	28.1 28.7 28.6 29.2	29.3 29.7 29.7 30.2	30.1 30.4 30.6 30.9	30.7 30.9 31.2 31.4	31.1 31.3 31.6 31.8	31.5 31.6 32.0 32.1	31.7 31.8 32.2 32.3	31.8 31.9 32.4 32.4
33.0 33.5 34.0	23.0 24.8 26. 23.3 25.2 26.	.7 27.8 28.7	29.5 30.2	30.7 31.2	31.6 31.9	32.2 32.4	32.6 32.8	33.0 33.1	33.2 33.3	33.4 33.4
34.5 35.0	23.7 25.6 27. 24.1 26.0 27. 24.5 26.4 28.	.5 28.7 29.7	30.5 31.1	31.7 32.1	32.5 32.9	33.2 33.4	33,6 33.8	34.0 34.1	34.2 34.3	34.4 34.4
35.5 36.0	24.9 26.9 28. 25.3 27.3 28.	.4 29.6 30.6 .8 30.0 31.0	31.4 32.1 31.9 32.5	32.6 33.1 33.1 33.6	33.5 33.9 34.0 34.4	34.2 34.4 34.7 34.9	34.6 34.8 35.1 35.3	35.0 35.1 35.5 35.6	35.2 35.3 35.7 35.8	35.4 35.4 35.9 35.9
36.5 37.0	25.7 27.7 29. 26.1 28.1 29.	.7 31.0 32.0	32.8 33.5	34.1 34.6	35.0 35.4	35.7 35.9	36.2 36.3	36.5 36.6	36.7 36.8	36.9 36.9
37.5 38.0 38.5	26.4 28.5 30. 26.8 28.9 30. 27.2 29.4 31.	.6 31.9 32.9	33.8 34.5	35.1 35.6	36.0 36.4	36.7 36.9	37.2 37.3	37.5 37.6	37.7 37.8	37.9 37.9
39.0 39.5	27.6 29.8 31.	.4 32.8 33.8	34.7 35.4	36.1 36.6	37.0 37.4	37.7 38.0	38.2 38.4	38.5 38.7	38.8 38.8	38.9 38.9
40.0 40.5	28.4 30.6 32. 28.8 31.0 32.	.3 33.7 34.8 .8 34.1 35.2	35.7 36.4 36.1 36.9	37.0 37.6 37.5 38.1	38.0 38.4 38.5 38.9	38.7 39.0 39.2 39.5	39.2 39.4 39.7 39.9	39.5 39.7	39.8 39.9 40.3 40.4	39.9 40.0
41.0 41.5	29.2 31.5 33. 29.6 31.9 33.	.7 35.1 36.2	37.1 37.9	38.5 39.0	39.5 39.9	40.2 40.5	40.7 40.9	41.1 41.2	41.3 41.4	41.4 41.5
42.0 42.5 43.0	30.0 32.3 34. 30.4 32.8 34. 30.8 33.2 35.	.6 36.0 37.1	38.1 38.8	39.5 40.0	40.5 40.9	41.2 41.5	41.7 41.9	42.1 42.2	42.3 42.4	42.4 42.5
43.5	31.2 33.6 35. 31.6 34.0 35.	.4 36.9 38.1	39.0 39.8	40.5 41.0	41.5 41.9	42.2 42.5	42.8 42.9	43-1 43-2	43.3 43.4	43.5 43.5
44.5 45.0	32.0 34.5 36. 32.4 34.9 36.	.3 37.8 39. 0 .8 38.3 39. 5	40.0 40.8 40.5 41.3	41.5 42.1 42.0 42.6	42.5 42.9 43.0 43.4	43.3 43.5	43.8 44.0	44.1 44.2 44.6 44.8	44.3 44.4	44.5 44.5 45.0 45.0
45.5 46.0 46.5	32.8 35.3 37. 33.3 35.8 37. 33.7 36.2 38	.7 39.2 40.5	41,5 42,3	43.0 43.6	44.0 44.5	44.8 45.1	45.3 45.5	45.7 45.8	45,9 45,9	46.0 46.0
47.0 47.5	33.7 36.2 38. 34.1 36.6 38. 34.5 37.1 39.	.6 40.2 41.4	42.4 43.3	44.0 44.6	45.1 45.5	45.8 46.1	46.3 46.5	46.7 46.8	46.9 47.0	47.0 47.0
48.0 48.5	34.9 37.5 39. 35.3 38.0 40.	.5 41.1 42.4 .0 41.6 42.9	43.4 44.3 43.9 44.8	45.0 45.6 45.5 46.1	46.1 46.5 46.6 47.0	46.8 47.1	47.4 47.6	47.7 47.8 48.2 48.3	47.9 48.0 48.4 48.5	48.0 48.0 48.5 48.5
49.0 49.5 50.0	35.7 38.4 40. 36.1 38.8 40. 36.6 39.3 41.	.9 42.5 43.8	44.9 45.8	46.5 47.1	47.6 48.0	48.4 48.7	48,9 49.1	49.3 49.4	49.5 49.5	49.5 49.6
- 0 - 0	J J-+J 71		70.3	71.0	,	7011 7702	77.17 77.10	77.0 77.7	20.0 30.0	2011 2011

STUMP DOB	0.0	0.2	0.4	0.6	0.8	1.0				HEIGHT 1.8					2.8	3.0	3.2	3.4	3,6	3.8	4.0
5.0	3.9	4-1	4.2	4.3	4.4	4.4	4.5	4.6	4.6	4.7	4.7	4.7	4.8	4.8	4.8	4.8	4.9	4.9	4.9	4.9	5.0
5.5 6.0	4.3	4.5	4.6 5.0	4.7 5.1	4.8 5.2	4.9 5.3	4.9 5.4	5.0 5.5	5.1 5.5	5.1 5.6	5.2 5.6	5.2 5.7	5.2 5.7	5.3 5.7	5.3 5.8	5.3 5.8	5.4 5.8	5.4 5.9	5.4 5.9	5.4 5.9	5.4 5.9
6.5	5.1	5.3	5.4	5.5	5.7	5.7	5.8	5.9	6.0	6.0	6.1	6.1	6.2	6,2	6.2	6.3	6.3	6.4	6.4	6.4	6.4
7.0 7.5	5.5 5.8	5.7 6.1	5.8 6.2	6.0	6.1	6.2	6.3	6.8	6.4	6.5	7.0	7.0	6.6 7.1	6.7 7.2	6.7 7.2	7.2	6.8 7.3	6.8 7.3	6.9 7.4	6.9 7.4	6.9 7.4
8.0	6.2	6.4	6.6	6.8	6.9	7.0	7.1	7.2	7.3	7.4	7.4	7.5	7.6	7.6	7.7	7.7	7.8	7.8	7.8	7.9	7.9
8.5 9.0	6.9	6.8 7.2	7.0 7.4	7.2	7.3 7.7	7.5 7.9	7.6 8.0	7.7 8.1	7.8 8.2	7.8 8.3	7.9 8.4	8.0 8.4	8.0	8.1	8.1	8.2	8.2	8.3 8.8	8.3	8.4 8.9	8.4 8.9
9.5	7.3	7.6	7.8	8.0	8.2	8.3	8.4	8.5	8.6	8.7	8.8	8.9	9.0	9.0	9.1	9.1	9.2	9.3	9.3	9.3	9.4
10.0 10.5	7.7 8.0	8.0	8.2 8.6	8.4	8.6 9.0	8.7 9.1	8.9 9.3	9.0 9.4	9.1 9.5	9.2 9.6	9.3	9.3 9.8	9.4	9.5	9.6	9.6	9.7	9.7 10.2	9.8	9.8	9.9
11.0	8.4	8.7	9.0	9.2	9.4	9.6	9.7	9.8	10.0	10.1	10.2	10.3	10.3	10.4	10.5	10.6	10.6	10.7	10.8	10.8	10.9
11.5 12.0	8.7 9.1	9.1 9.5	9.4	9.6	9.8	10.0	10.1	10.3	10.4	10.5	10.6	10.7	10.8	10.9	11.0	11.0	11.1	11.2	11.2	11.3	11.4
12.5	9.4									11.4											
13.0 13.5	9,8	10.2	10.5	10.8	11.0	11.2	11.4	11.5	11.7	11.8 12.3	11.9	12.1	12.2	12.3	12.4	12.4	12.5	12.6	12.7	12.8	12.8
14.0	10.5	10.9	11.3	11.5	11.8	12.0	12.2	12.4	12.5	12.7	12.8	13.0	13.1	13.2	13.3	13.4	13.5	13.6	13.7	13.7	13.8
14.5 15.0	10.8	11.3	11.6	11.9	12.2	12.4	12.6	12.8	13.0	13.1 13.6	13.3	13.4	13.5	13.6	13.7	13.8	13.9	14.0	14.1	14.2	14.3
15.5	11.5	12.0	12.4	12.7	13.0	13.2	13,4	13.6	13.8	14.0	14.1	14.3	14.4	14.5	14.7	14.8	14.9	15.0	15.1	15.2	15.3
16.0 16.5										14.4 14.8											
17.0	12.5	13.0	13.5	13.8	14.1	14.4	14.7	14.9	15.1	15.3	15.4	15.6	15.8	15.9	16.0	16.2	16.3	16.4	16.5	16.6	16.7
17.5 18.0	12.8	13.4	13.8	14.2	14.5	14.8	15.1	15.3	15.5	15.7	15.9	16.1	16.2	16.4	16.5	16.6	16.8	16.9	17.0	17.1	17.2
18.5	13.5	14.1	14.5	14.9	15.3	15.6	15.9	16.1	16.3	16.6	16.7	16.9	17.1	17.3	17.4	7.6	17.7	17.8	18.0	18.1	18.2
19.0 19.5										17.0											
20.0	14.4	15.1	15.6	16.0	16.4	16.8	17.1	17.3	17.6	17.4 17.8	18.0	18.2	18.4	18.6	18.8	18.9	19.1	19.2	19.4	19.5	19.7
20.5 21.0	14.8	15.4	15.9	16.4	16.8	17.1	17.4	17.7	18.0	18.2	18.5	18.7	18.9	19.0	19.2	19.4	19.6	19.7	19.9	20.0	20.2
21.5	15.4	16.1	16.6	17.1	17.5	17.9	18.2	18.5	18.8	19.1	19.3	19.5	19.7	19.9	20.1	20.3	20.5	20.7	20.8	21.0	21.1
22.0 22.5										19.5											
23.0										20.3											
23.5 24.0	16.6	17.4	18.0	18.5	19.0	19.4	19.8	20.1	20.4	20.7	21.0	21.2	21.5	21.7	21.9	22.1	22.3	22.5	22.7	22.9	23.1
24.5	17.2	18.0	18.7	19.2	19.7	20.1	20.5	20.9	21.2	21.5	21.8	22.1	22.3	22.6	22.8	23.0	23.3	23.5	23.7	23.9	24.0
25.0 25.5	17.5	18.3	19.0	19.6	20.1	20.5	20.9	21.3	21.6	21.9	22.2	22.5	22.8	23.0	23.3	23.5	23.7	23.9	24.1	24.3	24.5
26.0	18.1	18.9	19.7	20.3	20.8	21.2	21.7	22.1	22.4	22.7	23.1	23.3	23.6	23.9	24.1	24.4	24.6	24.9	25.1	25.3	25.5
26.5 27.0										23.1 23.5											
27.5	19.0	19.9	20.6	21.3	21.8	22.3	22.8	23.2	23.6	23.9	24.3	24.6	24.9	25.2	25.5	25.7	26.0	26.2	26.5	26.7	27.0
28.0 28.5	19.2	20 • 2	20.9	21.6	22.2	22.7	23.2	23.6	24.0	24.3 24.7	24.7	25.0	25.3	25.6	25.9	26.2	26.5	26.7	27.0	27.2	27.4
29.0	19.8	20.8	21.6	22.3	22.9	23.4	23.9	24.3	24.7	25.1	25.5	25.8	26.2	26.5	26.8	27.1	27.4	27.6	27.9	28.1	28.4
29.5 30.0										25.5 25.9											
30.5	20.6	21.6	22.5	23.2	23.9	24.5	25.0	25.5	25.9	26.3	26.7	27.1	27.4	27.8	28.1	28.4	28.7	29.0	29.3	29.6	29.8
31.0 31.5										26.7											
32.0	21.4	22.5	23.4	24.2	24.9	25.5	26.0	26.6	27.0	27.5	27.9	28.3	28.7	29.0	29.4	29.7	30.1	30.4	30.7	31.0	31.3
32.5 33.0										27.9 28.3											
33.5	22.2	23.3	24.3	25.1	25.9	26,5	27.1	27.7	28.2	28.6	29.1	29.5	29.9	30.3	30.7	31.1	31.4	31.8	32.1	32.4	32.7
34.0 34.5										29.0 29.4											
35.0	23.0	24.2	25.2	26.1	26.8	27.5	28.1	28.7	29.3	29.8	30.3	30.7	31.2	31.6	32.0	32.4	32.8	33.1	33.5	33.8	34.2
35.5 36.0	23.5	24.7	25.8	26.7	27.5	28.2	28.8	29.4	30.0	30.2 30.5	31.0	31.1	32.0	32.0	32.8	33.2	33.2	34.0	33.9	34.8	34.7 35.1
36.5	23.7	25.0	26.0	27.0	27.8	28.5	29.2	29.8	30.4	30.9	31.4	31.9	32.4	32.8	33.3	33.7	34.1	34.5	34.9	35.2	35.6
37.0 37.5	24.2	25.5	26.6	27.6	28.4	29.2	29.9	30.5	31.1	31.3 31.7	32.2	32.7	33.2	33.7	34.1	34.5	35.0	35.4	35.8	35.7	36.6
38.0	24.4	25.8	26.9	27.9	28.7	29.5	30.2	30.8	31.5	32.0	32.6	33.1	33.6	34.1	34.5	35.0	35.4	35.8	36.2	36.7	37.0
38.5 39.0										32.4 32.8											
39.5	25.1	26.5	27.7	28.7	29.6	30.4	31.2	31.9	32.5	33.1	33.7	34.3	34.8	35.3	35.8	36.3	36.7	37.2	37.6	38.1	38.5
40.0 40.5	25.6	27.0	28.2	29.3	30.2	31.1	31.8	32.6	33.2	33.5 33.9	34.5	35.0	35.6	36.1	36.6	37.1	37.2	38.1	38.5	39.0	39.0
41.0 41.5	25.8	27.3	28.5	29.6	30.5	31.4	32.2	32.9	33.6	34.2	34.8	35.4	36.0	36.5	37.1	37.6	38.1	38.5	39.0	39.5	39.9
42.0										34.6 35.0											
42.5 43.0										35.3											
43.5	26.9	28.5	29.8	31.0	32.0	32.9	33.8	34.6	35.3	35.7 36.0	36.7	37.3	38.0	38.6	39.1	39.7	40.2	40.8	41.3	41.8	42.3
44.0 44.5	27.1	28.7	30.1	31.2	32.3	33,2	34.1	34.9	35.7	36,4	37.1	37.7	38.4	39.0	39.5	40.1	40.7	41.2	41.7	42.3	42.8
45.0	27.5	29.2	30.6	31.8	32.9	33.8	34.7	35.6	36.4	36.7 37.1	37.8	38,5	39.1	39.8	40.4	41.0	41.5	42.1	42.6	43.2	43.7
45.5 46.0	27.7	29.4	30.8	32.0	33.1	34.1	35.0	35.9	36.7	37.4 37.8	38.2	38,9	39.5	40.2	40.8	41.4	42.0	42.5	43.1	43.6	44.2
46.5	28.1	29.9	31.3	32.6	33.7	34.7	35.7	36.5	37.4	38.1	38.9	39.6	40.3	41.0	41.6	42.2	42.8	43.4	44.0	44.6	45.1
47.0 47.5	28.3	30.1	31.5	32.8	34.0	35.0	36.0	36.9	37.7	38.5 38.8	39.3	40.0	40.7	41.4	42.0	42.6	43.3	43.9	44.5	45.0	45.6
48.0	28.7	30.5	32.0	33.3	34.5	35,6	36.6	37.5	38.4	39.2	40.0	40.7	41.4	42.1	42.8	43.5	44.1	44.7	45.4	46.0	46.6
48.5 49.0	28.9	30.7	32.3	33.6	34.8	35,9	36.9	37.8	38.7	39.5 39.9	40.3	41.1	41.8	42.5	43.2	43.9	44.5	45.2	45.8	46.4	47.0
49.5	29.3	31.2	32.7	34.1	35.3	36.4	37.5	38.4	39.4	40.2	41.0	41.8	42.6	43.3	44.0	44.7	45.4	46.1	46.7	47.4	48.0
50.0	29.5	31.4	33.0	34.3	35.6	36.7	37.8	38.8	39.7	40.6	41.4	42.2	43.0	43.7	44.4	45.1	45.8	46.5	47.2	47.8	48.4

STUMP										EIGHT						3.0		 2 4		3.8	4.0
DO8 5.0	3.9	4.1	0.4 4.2	0.6 4.3	0.8	1.0	4.6	4.6	4.7	1.8	4.8	2.2 4.8	4.8	4.8	4.9	4.9	4.9	4.9	4.9	5.0	5.0
5.5	4.2	4.5	4.6	4.7	4.8	4.9	5.0	5.1	5.1	5.2	5 . 2	5.3	5.3	5,3	5.4	5.4	5.4	5.4	5.4	5.5	5.5
6.0 6.5	4.6 5.0	4.9 5.2	5.0 5.4	5.2 5.6	5.3 5.7	5.4 5.8	5.5 5.9	5.5	5.6	5.6 6.1	5.7 6.2	5.7 6.2	5.8 6.2	5,8 6,3	5.8 6.3	5.9 6.3	5.9 6.4	5.9	5.9 6.4	5.9 6.4	6.5
7.0	5.4	5.6	5.8	6.0	6.1	6.3	6.4	6.4	6.5	6.6	6.6	6.7	6.7	6.8	6.8	6.8	6.9	6.9	6.9	6.9	7.0
7.5 8.0	5.8 6.1	6.0	6.3	6.4 6.9	7.0	6.7 7.1	6.8 7.3	6.9 7.3	7.0 7.4	7.0 7.5	7.1 7.6	7.2 7.6	7.2 7.7	7.2 7.7	7.3 7.8	7.3 7.8	7.4 7.8	7.4 7.9	7.4 7.9	7.4	7.5 7.9
8.5	6.5	6.8	7.1	7.3	7.4	7.6	7.7	7.8	7.9	8.0	8.0	8.1	8.2	8,2	8.2	8.3	8.3	8.4	8.4	8.4	8.4
9.0 9.5	6.9 7.2	7.2	7.5 7.9	7.7 8.1	7.9 8.3	8.0	8.1	8·3 8·7	8.3	8.4 8.9	9.0	8.6 9.0	8.6 9.1	8.7 9.2	8.7 9.2	8.8 9.3	8.8 9.3	8.8 9.3	8.9 9.4	8.9 9.4	8.9 9.4
10.0	7.6	8.0	8.3	8.5	8.7	8.9	9.0	9.2	9.3	9.4	9.4	9.5	9.6	9.6	9.7	9.7	9.8	9.8	9.9	9.9	9.9
10.5	8.0	8.4	8.7	8.9	9.1	9.3	9.5	9.6	9.7	9.8		10.0									10.4
11.0 11.5	8.4	9.2	9.1 9.5	9.4	9.6	9.8				10.7											
12.0	9.1	9.5		10.2	10.4	10.6	10.8			11.2											
12.5 13.0	9.4	9.9	10.7							11.6											
13.5	10.2	10.7	11.1	11.4	11.7	11.9	12.1	12.3	12.4	12.6	12.7	12.8	12.9	13.0	13.0	13.1	13.2	13.2	13.3	13.3	13.4
14.0 14.5			11.5																		13.9
15.0	11.2	11.8	12.3	12.6	12.9	13.2	13.4	13.6	13.8	13.9	14.0	14.2	14.3	14.4	14.5	14.5	14.6	14.7	14.8	14.8	14.9
15.5	11.6	12.2	12.7	13.0	13.3	13.6	13.8	14.0	14.2	14.4	14.5	14.6	14.7	14.8	14.9	15.0	15.1	15.2	15.2	15.3	15.4
16.0 16.5	12.0	12.9	13.0 13.4	13.8	14.2	14.5	14.7	14.9	15.1	15.3	15.4	15.6	15.7	15.8	15.9	16.0	16.1	16.1	16.2	16.3	16.4
17.0	12.7.	13.3	13.8	14.2	14.6	14.9	15.1	15.4	15.5	15.7	15.9	16.0	16.1	16.3	16.4	16.5	16.5	16.6	16.7	16.8	16.8
17.5 18.0	13.0	13.7	14.2	14.6	15.4	15.7	15.6	15.0	16.0	16.6	16.8	16.9	17.1	17.2	10.0	17.4	17.5	17.1	17.7	17.8	17.3
18.5	13.7	14.4	15.0	15.4	15.8	16.1	16.4	16.7	16.9	17.1	17.2	17.4	17.5	17.7	17.8	17.9	18.0	18.1	18.2	18.2	18.3
19.0			15.4																		
19.5 20.0	14.7	15.5	15.7 16.1	16.6	17.0	17.4	17.7	18.0	18.2	18.4	18.6	18.8	18.9	19.1	19.2	19.3	19.4	19.5	19.6	19.7	19.8
20.5	15.1	15.9	16.5	17.0	17.4	17.8	18.1	18.4	18.6	18.9	19.0	19.2	19.4	19.5	19.7	19.8	19.9	20.0	20.1	20.2	20.3
21.0 21.5	15.4	16.2	16.9 17.3	17.4	17.9	18.2	18.5	18.8	19.1	19.3	19.5	20.1	20.3	20.0	20.1	20.3	20.4	20.5	20.6	20.7	20.8
22.0	16.1	17.0	17.6	18.2	18.7	19.0	19.4	19.7	19.9	20.2	20.4	20.6	20.8	20.9	21.1	21.2	21.3	21.5	21.6	21.7	21.8
22.5	16.4	17.3	18.0 18.4	18.6	19.1	19.5	19.8	20.1	20.4	20.6	20.8	21.0	21.2	21.4	21.5	21.7	21.8	21.9	22.1	22.2	22.3
23.0 23.5	17.1	18.0	18.8	19.4	19.9	20.3	20.6	21.0	21.3	21.5	21.7	21.9	22.1	22.3	22.5	22.6	22.8	22.9	23.0	23.1	23.2
24.0	17.5	18.4	19.1	19.7	20.3	20.7	21.1	21.4	21.7	21.9	22.2	22,4	22.6	22.8	22.9	23.1	23.2	23.4	23.5	23.6	23.7
24.5 25.0	17.8		19.5 19.9																		
25.5	18.5	19.5	20.3	20.9	21.4	21.9	22.3	22.7	23.0	23.3	23.5	23.7	24.0	24.2	24.3	24.5	24.7	24.8	25.0	25.1	25.2
26.0 26.5	18.8	19.8	20.6	21.7	21.8	22.3	22.7	23.1	23.4	23.7	24.4	24.2	24.4	24.0	24.8	25.4	25.1	25.8	25.9	20.0	25.7
27.0	19.4	20.5	21.4	22.0	22.6	23.1	23.6	23.9	24.3	24.6	24.8	25.1	25.3	25.5	25.7	25.9	26.1	26.2	26.4	26.5	26.7
27.5	19.8		21.7																		
28.0 28.5	20.4	21.5	22.1	23.2	23.8	24.3	24.8	25.2	25.5	25.9	26.2	26.4	26.7	26.9	27.1	27.3	27.5	27.7	27.8	28.0	28.2
29.0	20.7	21.9	22.8	23.6	24.2	24.7	25.2	25.6	26.0	26.3	26.6	26.9	27.1	27.4	27.6	27.8	28.0	28.2	28.3	28.5	28.6
29.5 30.0	21.1	22.2								26.7										29.5	29.1
30.5	21.7	22.9	23.9	24.7	25.3	25.9	26.4	26.9	27.2	27.6	27.9	28.2	28.5	28.7	29.0	29.2	29.4	29.6	29.8	29.9	30.1
31.0 31.5	22.0	23.3	24.2 24.6	25.0	25.7	26.3	26.8	27.3	27.7	28.0	28.4	28.7	28.9	29.2	29.4	29.7	29.9	30.1	30.3	30.4	30.6
32.0		23.9	25.0	25.8	26.5	27.1	27.6	28.1	28.5	28.9	29.2	29.5	29.8	30.1	30.3	30.6	30.8	31.0	31.2	31.4	31.6
32.5 33.0		24.3	25.3 25.7							29.3										31.9	
33.5	23.6	24.9	26.0	26.9	27.6	28.3	28,8	29.3	29.8	30.2	30.5	30.9	31.2	31.5	31.7	32.0	32.2	32.4	32.7	32.9	33.0
34.0	23.9	25.3	26.4	27.3	28.0	28.7	29.2	29.7	30.2	30.6	31.0	31.3	31.6	31.9	32.2	32.4	32.7	32.9	33.1	33.3	33.5
34.5 35.0	24.2	25.9	26.7 27.1	28.0	28.8	29.4	30.0	30.5	31.0	31.4	31.8	32.2	32.5	32.8	33.1	33.4	33.6	33.9	34.1	34.3	34.5
35.5	24.8	26.3	27.4	28.3	29.1	29,8	30.4	31.0	31.4	31.9	32.3	32.6	33.0	33.3	33.6	33.8	34.1	34.3	34.6	34.8	35.0
36.0 36.5	25.4	26.9	27.7 28.1	29.1	29.9	30.2	31.2	31.8	32.3	32.7	33.1	33.5	33.8	34.2	34.5	34.8	35.0	35.3	35.5	35.8	36.0
37.0	25.7	27.2	28.4	29.4	30.3	31.0	31.6	32.2	32.7	33.1	33.5	33.9	34.3	34.6	34.9	35.2	35.5	35.7	36.0	36.2	36.5
37.5 38.0	26.0	27.6	28.8	29.8	30.6	31.7	32.0	32.6	33.1	33.5	34.4	34.4	34.7	35.5	35.4	35.7	36.0	36.7	37.0	30.7	37.4
38.5	26.6	28.2	29.5	30.5	31.4	32.1	32.8	33.4	33.9	34.4	34.8	35.2	35.6	36.0	36.3	36.6	36.9	37.2	37.4	37.7	37.9
39.0 39.5	26.9	28.5	29.8 30.1	30.8	31.7	32.5	33.2	33.8	34.3	34.8	35.2	35.7	36.0	36.4	36.7	37.1	37.4	37.6	37.9	38.2	38.4
40.0	27.5	29.2	30.5	31.6	32.5	33.3	34.0	34.6	35.1	35.6	36.1	36.5	36.9	37.3	37.6	38.0	38.3	38.6	38.9	39.1	39.4
40.5	27.8	29.5	30.8	31.9	32.8	33,6	34.3	35.0	35.5	36.1	36.5	37.0	37.4	37.7	38.1	38.4	38.7	39.0	39.3	39.6	39.9
41.0 41.5			31.1 31.5																		
42.0	28.7	30.4	31.8	33.0	33.9	34,8	35.5	36.2	36.8	37.3	37.8	38.2	38.7	39.1	39.4	39.8	40.1	40.5	40.8	41.1	41.3
42.5 43.0	29.0	30.7	32.1 32.5	33.3	34.3	35.1	35.9	36.6	37.2	37.7	38.4	38.7	39.1	39.5	39.9	40.3	40.6	40.9	41.2	41.5	41.8
43.5	29.6	31.4	32.8	34.0	35.0	35.9	36.7	37.3	38.0	38.5	39.1	39.5	40.0	40.4	40.8	41.2	41.5	41.9	42.2	42.5	42.8
44.0	29.8	31.7	33.1	34.3	35.4	36.3	37.0	37.7	38.4	38.9	39.5	40.0	40.4	40.8	41.2	41.6	42.0	42.3	42.7	43.0	43.3
44.5 45.0			33.5 33.8																		
45.5	30.7	32.6	34.1	35.4	36.4	37.4	38.2	38.9	39.6	40.2	40.7	41.2	41.7	42.2	42.6	43.0	43.4	43.7	44.1	44.4	44.7
46.0 46.5	31.0	32.9	34.4 34.8	35.7	36.8	37.7	38.6	39.3	40.0	40.6	41.1	41.7	42.1	42.6	43.0	43.4	43.8	44.2	44.6	44.9	45.7
47.0	31.5	33.5	35.1	36.4	37.5	38.5	39.3	40.1	40.B	41.4	42.0	42.5	43.0	43.5	43.9	44.3	44.7	45.1	45.5	45.9	46.2
47.5 48.0	31.8	33.8	35.4 35.7	36.7	37.8	38.8	39.7	40.5	41.2	41.8	42.4	42.9	43.4	43.9	44.4	44.8	45.2	45.6	46.0	46.3	46.7
48.5	32.4	34.4	36.0	37.4	38.5	39.5	40.4	41.2	41.9	42.6	43.2	43.8	44.3	44.8	45.3	45.7	46.1	46.5	46.9	47.3	47.6
49.0	32.6	34.7	36.3 36.7	37.7	38.9	39.9	40.8	41.6	42.3	43.0	43.6	44.2	44.7	45.2	45.7	46.2	46.6	47.0	47.4	47.8	48.1
49.5 50.0			37.0																		
	-		-	•		-	-			-		-		-				-			

STUMP DOB	0.0	0.2	0.4	0.6	0.8	1.0	1,2	\$1 1.4	TUMP	HEIGH	T (IN	FEET:	2.4	2,6	2.8	3.0	3.2	3.4	3.6	3.8	4.0
5.0	3.4	3.6	3.8	3.9	4 • 1	4.2	4.3	4.3	4.4	4.5	4.5	4.6	4.6	4.7	4.7	4.8	4.8	4.8	4.9	4.9	4.9
5.5 6.0	3.7 4.1	4.0 4.3	4.2 4.6	4.3 4.7	4.5	4.6 5.0	4.7 5.1	4.8 5.2	4.9 5.3	4.9 5.4	5.0 5.4	5.1 5.5	5.1 5.6	5.2 5.6	5.2 5.7	5.2 5.7	5.3 5.8	5.3 5.8	5.4 5.9	5.4 5.9	5.4 5.9
6.5 7.0	4.4	4.7 5.1	4.9 5.3	5.1 5.5	5.3	5.4	5.5	5.6	5.7	5.8	5.9	6.0	6.0	6.1	6.1	6.2	6.2	6.3	6.3	6.4	6.4
7.5	5.1	5.4	5.7	5.9	5.7 6.1	5.8 6.2	6.0	6.1	6.2	6.7	6.3	6.4	6.5 7.0	7.0	7.1	6.7 7.2	6.7 7.2	6.8 7.3	6.8 7.3	6.9 7.4	6.9 7.4 ··
8.0 8.5	5.4 5.8	5.8 6.1	6.0	6.3	6.5	6.6 7.1	6.8 7.2	6.9 7.4	7.0 7.5	7.2 7.6	7.2 7.7	7.3	7.4	7.5	7.6	7.6	7.7	7.7	7.8	7.8	7.9
9.0	6.1	6.5	6.8	7.1	7.3	7.5	7.6	7.8	7.9	8.0	8.1	7.8 8.2	8.3	8.0 8.4	8.0	8.1 8.6	8.2	8.2 8.7	8.3 8.8	8.3	8.4 8.9
9.5 10.0	6.4 6.8	6.8 7.2	7.2 7.5	7.4 7.8	7.7 8.1	7.9 8.3	8.1	8.2	8.4	8.5 8.9	8.6	8.7 9.2	8.8 9.3	8.9 9.4	9.0 9.4	9.0	9.1 9.6	9.2	9.3	9.3	9.4 9.9
10.5	7.1	7.5	7.9	8.2	8.5	8.7	8,9	9.1	9.2	9.4	9.5	9.6	9.7	9.8	9.9	10.0	10.1	10.2	10.2	10.3	10.4
11.0 11.5	7.4 7.7	7.9 8.2	8.3	8.6 9.0	9.3	9.1	9.3 9.7		9.7								10.6				
12.0	8.1	8.6	9.0	9.4	9.7	9.9	10.1	10.3	10.5	10.7	10.8	11.0	11.1	11,2	11.3	11.4	11.5	11.6	11.7	11.8	11.8
12.5 13.0	8.4 8.7	8.9 9.3	9.4 9.7														12.0				
13.5 14.0	9.0	9.6	10.1	10.5	10.8	11.1	11.4	11.6	11.8	12.0	12.2	12.3	12.5	12.6	12.7	12.8	12.9	13.0	13.1	13.2	13.3
14.5	9.7	10.3	10.8	11.3	11.6	11.9	12.2	12.5	12.7	12.9	13.1	13.2	13.4	13.5	13.7	13.8	13.4	14.0	14.1	14.2	14.3
15.0 15.5																	14.4				
16.0	10.7	11.4	11.9	12.4	12.8	13.2	13.5	13.7	14.0	14.2	14.4	14.6	14.8	14.9	15.1	15.2	15.3	15.4	15.6	15.7	15.8
16.5 17.0	11.0	11.7	12.7	12.8	13.2	13,6	13.9	14.6	14.4	14.6	14.8	15.0	15.2	15.4	15.5	15.7	15.8	15.9	16.0	16.2	16.3
17.5	11.6	12.4	13.0	13.5	14.0	14.4	14.7	15.0	15.3	15.5	15.7	15.9	16.1	16.3	16.5	16.6	16.7	16.9	17.0	17.1	17.2
18.0 18.5																	17.2 17.7				
19.0	12.6	13.4	14.1	14.7	15.1	15.6	15.9	16.3	16.5	16.8	17.1	17.3	17.5	17.7	17.8	18.0	18.2	18.3	18.5	18.6	18.7
19.5 20.0	13.2	14.1	14.8	15.4	15.9	16.4	16.7	17.1	17.4	17.7	17.9	18.2	17.9	18.6	18.8	19.0	18.6	19.3	18.9	19.1	19.2 19.7
20.5 21.0	13.5	14.4	15.2	15.8	16.3	16.8	17.2	17.5	17.8	18.1	18.4	18.6	18.8	19.0	19.2	19.4	19.6	19.8	19.9	20.0	20.2
21.5	14.2	15.1	15.9	16.5	17.1	17.5	18.0	18.3	18.7	19.0	19.3	19.5	19.7	20.0	20.2	20.4	20.1	20.7	20.9	21.0	21.2
22.0 22.5	14.5	15.5	16.2	16.9	17.5	17.9	18.4	18.8	19.1	19.4	19.7	20.0	20.2	20.4	20.6	20.8	21.0	21.2	21.4	21.5	21.7
23.0	15.1	16.1	16.9	17.6	18.2	18.7	19.2	19.6	19.9	20.3	20.6	20.8	21.1	21.3	21.6	21.8	22.0	22.1	22.3	22.5	22.6
23.5 24.0	15.4	16.5	17.3	18.0	18.6	19.1	19.6	20.0	20.4	20.7	21.0	21.7	21.6	21.8	22.5	22.2	22.4 22.9	22.6	22.8	23.5	23.1
24.5	16.0	17.1	18.0	18.7	19.4	19.9	20.4	20.8	21.2	21.6	21.9	22.2	22.5	22.7	22.9	23.2	23.4	23.6	23.8	23.9	24.1
25.0 25.5	16.4	17.8	18.4	19.1	19.8	20.3	20.8	21.2	21.6	22.0	22.8	22.6	22.9	23.2	23.4	23.6	23.8	24.1	24.2	24.4	24.6
26.0	17.0	18.1	19.1	19.8	20.5	21.1	21.6	22.1	22.5	22.9	23.2	23.5	23.8	24.1	24.3	24.6	24.8	25.0	25.2	25.4	25.6
26.5 27.0	17.6	18.8	19.4	20.2	21.3	21.9	22.0	22.9	22.9	23.7	24.1	24.4	24.7	25.0	25.3	25.5	25.3 25.7	25.5	25.7	25.9	26.1
27.5 28.0	17.9	19.1	20.1	20.9	21.6	22.3	22.8	23.3	23.7	24.1	24.5	24.8	25.1	25.4	25.7	26.0	26.2	26.4	26.6	26.9	27.0
28.5	18.5	19.8	20.8	21.7	22.4	23.0	23.6	24.1	24.6	25.0	25.4	25.7	26.0	26.3	26.6	26.9	26.7 27.1	27.4	27.6	27.8	28.0
29.0 29.5	18.8	20.1	21.1	22.0	22.8	23.4	24.0	24.5	25.0	25.4 25.8	25.8	26.2	26.5	26.8	27.1	27.4 27.8	27.6 28.1	27.9	28.1	28.3	28.5
30.0	19.4	20.8	21.8	22.7	23.5	24.2	24.8	25.3	25.8	26.3	26.7	27.0	27.4	27.7	28.0	28.3	28.6	28.8	29.1	29.3	29.5
30.5 31.0																	29.0 29.5				
31.5 32.0	20.3	21.7	22.9	23.8	24.7	25.4	26.0	26.6	27.1	27.5	28.0	28.4	28.7	29.1	29,4	29.7	30.0	30.2	30.5	30.7	31.0
32.5	20.9	22.4	23.6	24.5	25.4	26.1	26.8	27.4	27.9	28.4	28.8	29.2	29.6	30.0	30.3	30.6	30.4	31.2	31.4	31.7	31.9
33.0 33.5	21.2	22.7	23.9	24.9	25.8	26.5	27.2	27.8	28.3	28.8	29.3	29.7	30.1	30.4	30.8	31.1	31.4	31.7	31.9	32.2	32.4
34.0	21.8	23.3	24.6	25.6	26.5	27.3	28.0	28.6	29.1	29.7	30.1	30.5	30.9	31.3	31.7	32.0	32.3	32.6	32.9	33.2	33.4
34.5 35.0	22.1	23.7	24.9	26.0	26.9	27.7	28.4	29.0	29.6	30.1	30.5	31.4	31.4	31.8	32.1	32.5	32.8 33.2	33.1	33.4	33.6	33.9
35.5	22.7	24.3	25.6	26.7	27.6	28.4	29.2	29.8	30.4	30.9	31.4	31.9	32.3	32.7	33.0	33.4	33.7	34.0	34.3	34.6	34.9
36.0 36.5	23.3	24.9	26.3	27.4	28.4	29.2	29.9	30.2	31.2	31.8	32.3	32.3	33.2	33.6	34.0	34.3	34.2 34.7	35.0	34.8	35.6	35.4 35.9
37.0 37.5	23.6	25.2	26.6	27.7	28.7	29.6	30.3	31.0	31.6	32.2	32.7	33.2	33.6	34.0	34.4	34.8	35.1	35.4	35.8	36.1	36.3
38.0	24.2	25.9	27.3	28.4	29.5	30.3	31.1	31.8	32.4	33.0	33.5	34.0	34.5	34.9	35.3	35.7	35.6 36.1	36.4	36.7	37.0	37.3
38.5 39.0	24.5	26.2	27.6	28.5	29.8	30.7	31.5	32.2	32.8	33.4	34.0	34.5	34.9	35.4	35.8	36.2	36.5	36.9	37.2	37.5	37.8
39.5	25.0	26.8	28.3	29.5	30.5	31.5	32.3	33.0	33.7	34.3	34.8	35.3	35.8	36.3	36.7	37.1	37.5	37.8	38.1	38.5	38.8
40.0 40.5	25.6	27.4	28.9	30.2	30.9	31.8	32.7	33.4	34.1	34.7	35.2	35.8	36.3	36,7	37.1	37.5	37.9 38.4	38.3	38.6	39.0	39.3
41.0	25,9	27.8	29.3	30.5	31.6	32.6	33.4	34.2	34.9	35.5	36.1	36.6	37.1	37.6	38.0	38.5	38.8	39.2	39.6	39.9	40.2
41.5 42.0	26.2	28.4	29.9	31.2	32.4	33.3	34.2	35.0	35.7	35.9	36.9	37.1	37.6	38.5	38.5	38.9	39.3	39.7	40.1	40.4	40.7
42.5 43.0	26.8	28.7	30.3	31.6	32.7	33.7	34.6	35.4	36.1	36.8	37.4	37.9	38.4	38.9	39.4	39.8	40.2	40.6	41.0	41.4	41.7
43.5	27.3	29.3	30.9	32.3	33.4	34,5	35.4	36.2	36.9	37.6	38.2	38.8	39.3	39.8	40.3	40.7	40.7	41.6	42.0	42.3	42.7
44.0 44.5	27.6	29.6	31.2	32.6	33.8	34.8	35.8	36.6	37.3	38.0	38.6	39.2	39.8	40.3	40.8	41.2	41.6	42.0	42.4	42.8	43.2
45.0	28.2	30.2	31.9	33.3	34.5	35,6	36.5	37.4	38.1	38.8	39.5	40.1	40.6	41.2	41.7	42.1	42.6	43.0	43.4	43.8	44.1
45.5 46.0	28.5 28.7	30.5	32.2	33.6	34.9	35,9	36.9	37.8	38.5	39.2	39.9	40.5	41.1	41.6	42.1	42.6	43.0	43.5	43.9	44.3	44.6
46.5	29.0	31.1	32.9	34.3	35.6	36,7	37.7	38.5	39.3	40.1	40.7	41.4	41.9	42.5	43.0	43.5	44.0	44.4	44.B	45.2	45.6
47.0 47.5	29.6	31.7	33.5	35.0	36.3	37,4	38.4	39.3	40.1	40.9	41.6	42.2	42.8	43.4	43.9	44.4	44.4 44.9	45.3	45.8	46.2	46.6
48.0 48.5	29.9	32.0	33.8	35.4	36.7	37.8	38.8	39.7	40.5	41.3	42.0	42.6	43.3	43.8	44.4	44.9	45.3	45.8	46.2	46.7	47.1
49.0	30.4	32./	34.5	36.0	37.4	38.5	39.6	40.5	41.3	42.1	42.8	43.5	44.1	44.7	45.3	45.8	45.8 46.3	46.7	47.2	47.6	48.0
49.5 50.0	30.7	33.0	34.8	36.4	37.7	38.9	39.9	40.9	41.7	42.5	43.3	43.9	44.6	45.1	45.7	46.2	46.7 47.2	47.2	47.7	4 R . 1	48.5
	• -		• • •	• 1	- 3 • •	- / • •			1	-17	/		0	77,0	-0.2	-0.7	71.6	-1 • f	70.1	70.0	- 7•∪